

iBVD

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5562742758-00131
Version
2

Skapad
2019-04-05
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2023-07-18



Uppgiftslämnaren reserverar sig för eventuella fel i produktinformationen eller felaktigt registrerade uppgifter och förbehåller sig rätten att korrigera och/eller komplettera produktinformation utan föregående avisering

1 GRUNDDATA

Varubeskrivning

LK Mottagarenhet 8 ICS.2 används tillsammans med LK Rumstermostat RF ICS.2 (trådlösa) eller LK Rumstermostat W ICS.2 (trådbundna).

Till mottagarenheten kan 8 stycken LK Rumstermostat ICS.2 adresseras, trådförbundna eller trådlösa. Enheten kan styra upp till 12 st golvkretsar via LK Ställdon 24 V (NO).

Enheten har ett inbyggt 24h program för ventil- och pumpmotionering. Vidare är enheten försedd med två stycken potentialfria utgångar som vid behov används för start/ stopp av pump och värmekälla. För att start/ stopp av pump och värmekälla ska fungera i ett större system kan flera mottagarenheter kommunicera med varandra trådlöst.

Vidare är enheten försedd med 1 st ingång för temperatursänkning via en extern signal, t.ex. via GSM Switch. Enheten kan kompletteras med LK Webserver för styrning via mobil, platta eller dator. Systemet kan också kommunicera via Modbusprotokoll för anslutning till övergripande fastighetsautomation.

Från mottagarenhetens inbyggda USB-ingång kan golvvärmesystemet enkelt loggas för kontroll och felsökning.

ENDAST kompatibel med ICS.2-serien.

Under dokumentation finns en FAQ som beskriver kända fel på ICS.2

Letar du efter senaste mjukvaran?

Du hittar den under:

<https://lagerstedtkrantz.sharepoint.com/sites/vvs/SitePages/Program.aspx>

Övriga upplysningar

Klassificeringar

ETIM >	-EC010090 - Kontrollsystem för golvvärme, vägginbyggt
BK04 >	-20506 - Golvvärme vattenburen
BSAB >	-P - P - Apparater, ledningar m m i rörsystem eller rörledningsnät
UNSPSC >	

Leverantörsuppgifter

Företagsnamn

LK Systems AB

Organisationsnummer

5562742758

Adress

Johannesfredsvägen 7

Hemsida

www.lksystems.se

Miljökontaktperson**Namn**

Hans Bramevik

Telefon

0406985000

E-post

info@lksystems.se

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HÅLLBARHETSARBETE

Företagets certifiering

- ISO 9001
- ISO 14001

Polycys och riktlinjer

3

INNEHÅLLSDEKLARATION

Kemisk produkt	Nej
Innehåller produkten elektronik	Ja
Omfattas varan av RoHs-direktivet	Ja
Varans vikt	1,5 - kg

Vara / Delkomponenter

Koncentrationen har beräknats på komponentnivå

Elektronik - av hela varan

Ingående material /komponenter	Vikt-% i komponent	CAS-nr (alt legering)	EG-nr (alt legering)	Vikt % i produkt	Kommentar
- 100% av hela varan					
Tenn	0,1%	7440-31-5	231-141-8	0,1%	Alpha Vaculoy Solder Bar SACX0307. Se även bifogad MSDS
Lödtenn	0,1%	Övrigt, metaller		0,1%	Solder Paste F

					640 SA 30 C 5 - 89 M 30 Lead-free. Se bifogat datablad Heareus
Förzinkat stål	1,9%	Övrigt, metaller		1,9%	Screws
Koppar	4,9%	7440-50-8	231-159-6	4,9%	Pre-assembled supply cable (Mains cable with euro plug) Telephone cable C604-MU 4-POL Black Conductor: copper Insulation PVC Conductor: copper Insulation PPE Sheath PVC
Carbonic dichloride, polymer with 4,4'-(1-methylethylidene)bis[phenol]	28,4%	25971-63-5	Saknas	28,4%	
Elektronik (Kretskort/mönsterkort)	58,4%	Övrigt, elektronik		58,4%	Terminals, relays, connectors, fuses, transformer etc.
Glas, Glass, oxide, chemicals	6,2%	65997-17-3	266-046-0	6,2%	

Del av materialinnehållet som är deklarerat

100%

Särskilt farliga ämnen

Varan innehåller INTE några ämnen med särskilt farliga egenskaper (Substances of very high concern, SVHC-ämnen) som finns med på kandidatförteckningen i en koncentration som överstiger 0,1 vikts-%

Utgåva av kandidatförteckningen som har använts

2023-07-18

Nanomaterial

Innehåller produkten tillsatt nanomaterial, som är medvetet tillsatta för att uppnå en viss funktion?: Nej

Tillsatt högflourerade ämnen (PFAS)

Innehåller produkten tillsatt högflourerade ämnen (PFAS), som är aktivt tillsatta för att uppnå en specifik funktion?: Nej

Övrigt

Ämnen är redovisade ned till 0,01% viktprocent enligt iBVDs redovisningskrav. Eventuell avvikelser från redovisningskraven redovisas nedan

4

RÅVAROR**Återvunnet material**

Innehåller varan återvunnet material: Nej

Träråvara

Träråvara ingår i varan: Nej

5

MILJÖPÅVERKAN

Finns en miljövarudeklaration framtagen enligt EN15804 eller ISO14025 för varan

Nej

Finns annan miljövarudeklaration

Nej

6

DISTRIBUTION

Beskrivning av emballagehantering för distribution av varan

Förpackningsmaterial är kartong. LK systems är ansluten till FTI

7

BYGGSCHEDET

Ställer varan särskilda krav vid lagring?

Ja

Inomhus och torrt

Ställer varan särskilda krav på omgivande byggvaror?

Nej

8

BRUKSSCHEDET

Finns skötselansvisningar/skötselråd?

Nej

Finns en energimärkning enligt energimärkningsdirektivet (2017/1369/EU) för varan?

Ja

9

RIVNING

Kräver varan särskilda åtgärder för skydd av hälsa och miljö vid rivning/demontering? Nej

10

AVFALLSHANTERING

Omfattas den levererade varan av förordningen (2014:1075) om producentansvar för elektriska och elektroniska produkter när den blir avfall? Ja

Är återanvändning möjlig för hela eller delar av varan? Ja

Går att återmontera

Är materialåtervinning möjlig för hela eller delar av varan? Ja

Sorteras som elavfall

Är energiåtervinning möjlig för hela eller delar av varan? Nej

Har leverantören restriktioner och rekommendationer för återanvändning, material- eller energiåtervinning eller deponering? Nej

När den levererade varan blir avfall, klassas den då som farligt avfall? Ja

Avfallskod (EWC) för den levererade varan 160214

RSK-nummer	Eget Artikel-nr	GTIN
243 46 24		7331590038313
243 46 25		7331590038399

Produktdatablad

Prestandadeklaration eu-declaration-of-conformity.pdf

Säkerhetsblad

RoHS-intyg

Miljövarudeklaration

Skötselansvisning

Övriga bifogade dokument

-Alpha Vaculoy Solder Bar SACX0307.pdf

-heareus-lead-F640_Datasheet.pdf

EC Declaration of Conformity

We

LK Systems AB
Box 66
168 69 Bromma
SWEDEN
+46 (0)8-506 851 00
info@lksystems.se

This declaration of conformity is issued under the sole responsibility of the manufacturer (or installer):

Equipment: (RSK, NRF, LVI)

2434624, 8254726, 2073940 LK MOTTAGARENHET 8 ICS.2 (NO)
2434626, 8254728, 2073941 LK MOTTAGARENHET 1 ICS.2 (NO)
2434620, 8254721, 2073936 LK RUMSTERMOSTAT RF ICS.2 VIT
2434621, 8254724, 2073937 LK RUMSTERMOSTAT W ICS.2 VIT
2434618, 8254719, 2073934 LK RUMSTERMOSTAT RF ICS.2 SVART
2434622, 8254723, 2073938 LK RUMSTERMOSTAT W ICS.2 SVART
2434619, 8254722, 2073935 LK RUMSTERMOSTAT RF ICS.2 SILVER
2434623, 8254725, 2073939 LK RUMSTERMOSTAT W ICS.2 SILVER
Brand name: LK Systems AB

The objects of the declaration described above is in conformity with the relevant Community harmonisation legislation:

Radio Equipment (RED)

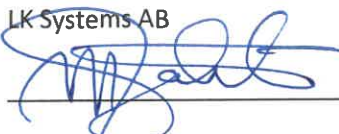
Directive 2014/53/EU

For compliance assessment, harmonized standards were used:

EMC: EN 61000-6-1:2007
EN 61000-6-3:2007,
EN 61000-6-3:2007/A1:2011/AC:2012,
EN 61000-6-3:2007/A1:2011
EN 301 489-1 V1.9.2
LVD: EN 60730-1:2011
RED: EN 300 220-2 V3.1.1
RoHS: EN IEC 63000:2018

Bromma 19.12.2022

LK Systems AB



Michael Söderberg Managing Director

SAFETY DATA SHEET



Alpha Vaculoy Solder Bar SACX0307 1 Kg

1. Identification of the substance/preparation and of the company/undertaking

Product name : Alpha Vaculoy Solder Bar
SACX0307 1 Kg

Code : 53549

Head Office : **Cookson Electronics** **Manufacturer** : Cookson Electronics Assembly
Materials Group
Forsyth Road Naarden Manufacturing Site
Sheerwater Energiestraat 21
Woking 1411 AR Naarden
Surrey The Netherlands
England
GU21 5RZ
Tel: +44(0)1483 758400
Fax: +44(0)1483 728837
Tel: +31 (35) 695 5411
Fax: +31 (35) 694 8451

2. Composition/information on ingredients

Substance/Preparation : Preparation

Chemical name*	CAS no.	%	EC Number	Classification
Europe tin	7440-31-5	80-100	231-141-8	
See Section 16 for the full text of the R Phrases declared above				

* Occupational Exposure Limit(s), if available, are listed in Section 8

3. Hazards identification

The preparation is not classified as dangerous according to Directive 1999/45/EC and its amendments.

Skin contact : Irritation of the product in case of skin contact: Not available. Sensitization of the product: Not available.

Aggravating conditions : Repeated or prolonged exposure is not known to aggravate medical condition.

4. First-aid measures

First-Aid measures

- Inhalation** : If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Obtain medical attention.
- Ingestion** : Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : In case of contact, immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Wash clothing before reuse. Clean shoes thoroughly before reuse. Obtain medical attention.
- Eye Contact** : Check for and remove any contact lenses. In case of contact, immediately flush eyes with a copious amount of water for at least 15 minutes. Obtain medical attention.

5. Fire-fighting measures

Extinguishing Media

Suitable : Not applicable.

Special fire-fighting procedures : Fire fighters should wear self-contained positive pressure breathing apparatus (SCBA) and full turnout gear.

6. Accidental release measures

- Personal Precautions** : Safety glasses. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
- Environmental precautions and cleanup methods** : Use a shovel to put the material into a convenient waste disposal container. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Note: See section 8 for personal protective equipment and section 13 for waste disposal.

7. Handling and storage

- Handling** : No specific safety phrase has been found which is applicable for this product.
- Storage** : Keep container in a cool, well-ventilated area.
- Packaging materials**
- Recommended use** : Use original container.
- Danish Fire Class** : Not applicable.

8. Exposure controls/personal protection

- Engineering measures** : Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.
- Hygiene measures** : Wash hands after handling compounds and before eating, smoking, using lavatory, and at the end of day.

<u>Ingredient Name</u>	<u>Occupational Exposure Limits</u>
Europe tin	ACGIH TLV (United States, 2002). TWA: 2 mg/m ³ 8 hour(s).
Sweden	
Denmark	
Norway	
France	
Netherlands tin	Nationale MAC-lijst (Netherlands, 2001). Notes: Tentative TGG 8 uur: 2 mg/m ³ 8 hour(s).
Germany tin	TRGS900 MAK (Germany, 2002). TWA: 2 mg/m ³ 8 hour(s).
Finland tin	Työterveyslaitos (Finland, 2002). TWA: 2 mg/m ³ 8 hour(s).
United Kingdom (UK) tin	EH40-OES (United Kingdom (UK), 2002). TWA: 2 mg/m ³ 8 hour(s). STEL: 4 mg/m ³ 15 minute(s).
Austria tin	BMWA_MAK (Austria, 2001). STEL: 4 mg/m ³ 4 times per shift, 15 minute(s). TWA: 2 mg/m ³ 8 hour(s).
Switzerland	
Belgium tin	Lijst Grenswaarden (Belgium, 1998). Skin VL: 2 mg/m ³ 8 hour(s).
Spain tin	INSHT (Spain, 2001). TWA: 2 mg/m ³ 8 hour(s).

Personal protective equipment

Alpha Vaculoy Solder Bar SACX0307 1 Kg

Skin and body : Lab coat.
Eyes : Safety glasses.

9. Physical and chemical properties

Physical state : Solid.
Colour : Silvery.
Odour : Not available.
pH : Not applicable.
Melting point : 231.8°C (449.2°F) based on data for: tin.
Flash point : Not applicable.
Explosive properties : Risks of explosion of the product in presence of mechanical impact: Not available.
Risks of explosion of the product in presence of static discharge: Not available.
Oxidizing properties : Not available.
Density : The only known value is 7.31 g/cm³ (tin).
Solubility : Insoluble in cold water, hot water.

10. Stability and reactivity

Stability : The product is stable.
Hazardous decomposition products :

11. Toxicological information

Local effects
Chronic toxicity : Repeated or prolonged exposure is not known to aggravate medical condition.

12. Ecological information

13. Disposal considerations

Methods of disposal ; Waste of residues ; Contaminated packaging : Waste must be disposed of in accordance with federal, state and local environmental control regulations.
Waste Classification : Not applicable.
European Waste Catalogue (EWC) : Not available.
Hazardous Waste : To present knowledge of the supplier, this product is not regarded as hazardous waste as defined by EU Directive 91/689/EC.

14. Transport information

International transport regulations

Regulatory Information	UN number	Proper shipping name	Class	Packing group	Label	Additional Information
ADR/RID Class	Not regulated.	-	-			-
IMDG Class	Not regulated.	-	-			-
IATA-DGR Class	Not regulated.	-	-			-

15. Regulatory information

EU Regulations

- Risk Phrases** : This product is not classified according to the EU regulations.
- Product Use** : Classification and labelling have been performed according to EU directives 67/548/EEC, 1999/45/EC, including amendments and the intended use.
- Industrial applications.
- Additional Warning Phrases** : Safety data sheet available for professional user on request.
- EC Statistical Classification (Tariff Code)** : 32089091

National regulations

Denmark

- Additional Warning Phrases** : Not applicable.
- Denmark – Cancer Risks** : Not available.
- Denmark – Restrictions on Use** : Not available.
- Statutory Order 571 on Aerosols** : Not applicable.

Netherlands

- K-Klasse** : K5
- CPR** : Not regulated.
- SHHR** : 0ZZ

Germany

- Employment restrictions in accordance with § 15b of the Hazardous Substance Ordinance** : No.
- Hazardous Incident Ordinance** : No.
- Ordinance on Combustible Liquids** : Class: Omitted
- Technical instruction on air quality control** : Class III 3.1.4: 0.7%
- Hazard class for water** : nwg

16. Other information

- Full text of R-Phrases with no. appearing in Section 2 - Europe** :
Text of classifications appearing in Section 2 - Europe :

HISTORY

- Date of printing** : 07/04/2004.
- Date of issue** : 07/04/2004.
- Date of previous issue** : No Previous Validation.
- Version** : 2
- Prepared by** : Simon Hosken
Environmental, Health and Safety Manager

Notice to Reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

Technical Data Sheet

Lead free Solder Paste Series F 640



No Clean Solder Pastes with excellent wetting

1. Description

F 640 Solder Paste series is a state-of-the-art lead free no clean solder paste that promotes wetting and minimises soldering defects. The F 640 flux system is specifically optimised for Sn/Ag/Cu alloy soldering. Extensive testing at customer locations has proven this paste to be capable of defect-free performance in the production environment.

The F 640 Series exhibits minimal slump and has excellent print-after-wait performance.

This formula provides superior performance on a variety of surfaces finishes and leaves behind a clear residue. Reflow can be accomplished in air or nitrogen.

Key Benefits

- Exceptional print to print consistency
- Excellent wetting
- Min. 8 hour tack and work life
- Very good print after wait performance
- SIR 85/85 > 10E10 Ohm
- Constant performance at 30°C for 7days
- Work conditions between 20 and 32°C
- Fulfils Siemens Standard accord. DIN EN 29454 Part 1 (see Test certificate from January 24, 2004)

2. Product Indication

Indication:	F640SAC Series
Alloy:	Sn95.5/Ag4/Cu0.5 (Standard) Sn96.5/Ag3/Cu0.5 (upon request) Other alloys are available on request.

3. Physical Properties

Metal powder:

Particle size:	Type 3 = 25 –45 microns (325/+500 mesh) Other powder sizes upon request.
Shape:	Spherical
Melting Point:	Sn95.5/Ag4/Cu0.5 = 217°C Sn96.5/Ag3/Cu0.5 = 217°C
Composition:	Sn95.5/Ag4/Cu0.5 = F640SA40C5-89M30 Sn96.5/Ag3/Cu0.5 = F640SA30C5-89M30 Other lead free alloys upon request.
Density:	Sn95.5/Ag4/Cu0.5 7,4 g/cc Sn96.5/Ag3/Cu0.5 7,4 g/cc

Solder Paste:

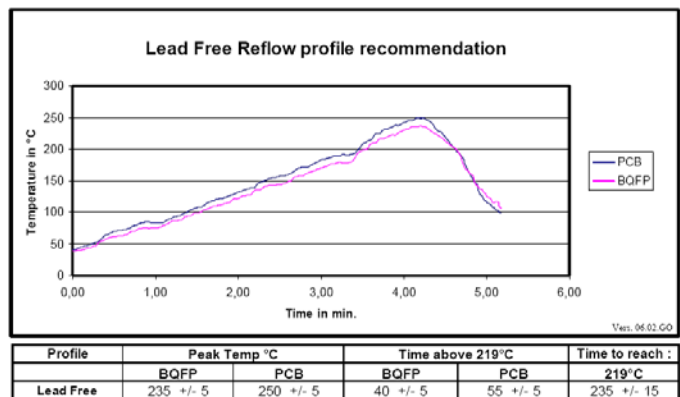
Metal Content:	Standard 89% ± 1%
Viscosity Range:	130 ± 40 Pas Physica CSS 10 s-1
Density:	3,9 ± 0,2 g/ml

4. Performance Properties

Typical Print Thickness:	0,4 – 0,65 mm pitch: 150 microns <0,4 mm pitch: 120 microns
Minimum Pitch:	16 mil (400 microns)
Minimum Pad Width:	8 mil (200 microns, stencil thickness 150microns)

5. Reflow Parameters (recommendation)

- For optimum results, the paste should be reflowed at a peak temperature of 15-30°C above the melting temperature of the alloy.
- Time above melting temperature should be maintained for 30-90 seconds.
- Heating should be uniform across the substrate and components.
- Reflow can be accomplished with any industry accepted process in air or N₂.



6. Residue Properties

Flux Activity:	According to J-STD-004	L 0
	DIN EN 61190-1-1 ISO	1.2.2.C
SIR:	J-STD-004 > 1 x 10 ⁸	pass
Copper Mirror:	J-STD-004	pass
Silver Chromate Test Paper:	J-STD-004	pass

7. Recommended Processing Guidelines

After reflow the flux residues may remain on the circuit. They do not need to be cleaned. If desired, the residues can be washed with various Zestron and Vigon cleaning materials.

For cleaning wet with different Zestron and Vigon cleaning materials see separate recommendations.

If the printing interval exceeds 1 hour, remove the paste from the stencil.

The printed solder paste remains tacky for more than 8 hours to allow device insertion. The exact time depends on environmental conditions.

If the printed circuit boards will be stored for more than 6 hours

after populating and prior to reflow, it is advisable to store the boards in a tightly closed area. This is especially important if the humidity exceeds 83%.

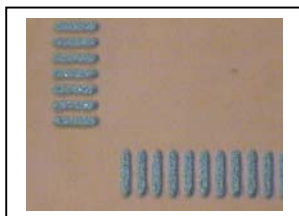
8. Storage

Store the solder paste in tightly-sealed jars and avoid exposure to sunlight and high humidity.

In jars:
Min. 6 months in a refrigerator at 2-10°C (35-50°F)

In syringes:
Min. 3 months in a refrigerator at 2-10°C (35-50°F)
Store syringes tip down!

Paste is qualified at Siemens Corporate Technology Berlin.
Print and Reflow conditions see technical information.



Pitch 0.4 on Cu substrate

The descriptions and engineering data shown here have been compiled by Heraeus using commonly-accepted procedures, in conjunction with modern testing equipment, and have been compiled as according to the latest factual knowledge in our possession. The information was up-to date on the date this document was printed (latest versions can always be supplied upon request). Although the data is considered accurate, we cannot guarantee accuracy, the results obtained from its use, or any patent infringement resulting from its use (unless this is contractually and explicitly agreed in writing, in advance). The data is supplied on the condition that the user shall conduct tests to determine materials suitability for a particular application.

Europe

W. C. Heraeus GmbH
Circuit Materials Division
Heraeusstr. 12 – 14
63450 Hanau
Germany
Phone: +49 (0) 6181 35 – 5265
E-Mail: cmdinfo@heraeus.com
Internet: www.4cmd.com

North America

Heraeus Incorporated
Circuit Materials Division
24 Union Hill Road
West Conshohocken, PA 19428
USA
Phone: +1 (610) 825 – 6050
E-Mail: techservice@4cmd.com
Internet: www.4cmd.com

Asia

Heraeus Ltd.
Heraeus Technology Centre
30 On Chuen Street,
On Lok Tsuen, Fanling, N.T.
Hong Kong
Phone: +852 (2675) 1200
E-Mail: cmdinfo@heraeus.com.hk
Internet: www.4cmd.com