Group 2

Circuit printing lacquers

This survey report gives a comprehensive overview of product group 2. For further information please refer to the technical reports (TR) and application information sheets (AI), in which the mentioned products are described in detail.

For more extensive advice, our application technology department (ATD) is at your disposal at any time.

The first column of this survey corresponds to the order in which our technical reports (TR) are filed in the report manual and/or supplements and new technical reports are to be added. Thus this survey also serves as a table of contents of product group 2.

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Registered trademark of Underwriters Laboratories Inc.; Northbrook, Illinois 60062.

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1. Application information sheets

Application Information sheets (AI) apply to various lacquers/lacquer series’ and supplement the Technical Reports on these lacquers by giving detailed explanations of possible application procedures and individual process steps plus offering numerous practical tips and advice to safeguard the optimum processing of our products.

The associated Technical Reports provide - in a concise and clear manner - numerous characteristics and processing data in transparent diagrams, graphics and tables.

Currently the following application information sheet for group 2 is available:

**AI 2/1** “Processing information for the photoimageable solder resists of the series’ ELPemer® 2467, ELPemer® 2469 and ELPemer® 2463 FLEX”.

2. Etch and plating resists

2.1 General characteristics

- high definition enables the representation of fine conductors
- UV and thermal curing
- excellent adhesion and high surface hardness
- the flake strippable etch and plating resists (index FS) offer the advantage that the flakes can be removed from the stripper medium by means of filters so that the waste water contamination is reduced and the service life of the stripping solution increased.

2.2 Special characteristics of the liquid ELPemer® photoresists

- owing to their outstanding resolution, even ultra-fine conductors < 50 µm can be represented with the photoimageable resists of the series ELPemer®
- particularly suited for the production of multilayer inner layers.

2.3 Product-specific characteristics

<table>
<thead>
<tr>
<th>Product (series)</th>
<th>Special properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Etch and plating resist</td>
<td>• application by screen printing</td>
</tr>
<tr>
<td>SD 2050 UV, blue</td>
<td>• UV curing (index UV)</td>
</tr>
<tr>
<td></td>
<td>• suited for 150 µm technology</td>
</tr>
<tr>
<td></td>
<td>• can be used to etch 400 µm copper</td>
</tr>
<tr>
<td></td>
<td>• resistant up to pH 9</td>
</tr>
<tr>
<td></td>
<td>• very easily stripped in alkaline media</td>
</tr>
<tr>
<td>Etch and plating resist</td>
<td>• application by screen printing</td>
</tr>
<tr>
<td>SD 2051 UV-AL-FS, blue</td>
<td>• UV curing (index UV)</td>
</tr>
<tr>
<td></td>
<td>• suited for 150 µm technology</td>
</tr>
<tr>
<td></td>
<td>• resistant to acid etching and plating baths</td>
</tr>
<tr>
<td></td>
<td>• very easily stripped in alkaline media (index AL)</td>
</tr>
<tr>
<td></td>
<td>• index FS = flake strippable</td>
</tr>
<tr>
<td>Etch resists of the</td>
<td>• application by screen printing</td>
</tr>
<tr>
<td>series SD 2052 AL</td>
<td>• air and oven drying</td>
</tr>
<tr>
<td>SD 2042 AL, black</td>
<td>• resistant up to pH 9.5</td>
</tr>
<tr>
<td>SD 2052 AL, blue</td>
<td>• easily stripped in alkaline media (index AL)</td>
</tr>
<tr>
<td>Product (series)</td>
<td>Special properties</td>
</tr>
<tr>
<td>-----------------</td>
<td>--------------------</td>
</tr>
</tbody>
</table>
| Etch and plating resist SD 2053 UV-AL, blue | • application by screen printing  
• UV curing (index UV)  
• suited for 150 µm technology  
• can be used to etch 400 µm copper  
• resistant to acid etching and plating baths  
• very easily stripped in alkaline media (index AL) |
| 1-pack photoresist RC 2054 HR, blue transparent | • application by roller coating (index RC), curtain coating, dipping, spray coating  
• photoinimageable etch resist  
• no fillers and pigments, thus high productivity and no disturbing sediment in developer, thus little cleaning work required  
• fast drying and very low exposure energy  
• significant colour change during exposure from colourless to blue-violet ensures good visual control  
• excellent resolution (< 50 µm, index HR = high resolution)  
• aqueous-alkaline developable  
• resistant to acid etching baths  
• strippable in small, easily filtered flakes |
| 1-pack photoresists of the series SD 2054 SD 2054, blue transparent SD 2054 I, colourless/blue-violet | • application by screen printing  
• photoinimageable etch and plating resist  
• similar to RC 2054 HR, but applied by screen printing  
• SD 2054 I contains a colour indicator (index I): colour change from colourless to blue-violet during exposure |
| Etch resist SD 2057 UV, blue | • application by screen printing  
• UV curing (index UV)  
• suited for 150 µm technology  
• resistant up to pH 9.5  
• fast curing and strippability  
• strippable in alkaline media |
| Etch resists of the series SD 2058 UV-FS SD 2058 UV-FS, blue SD 2058 UV-FS-HV, blue SD 2058 UV-FS-SHV, blue | • application by screen printing  
• available in various viscosity adjustments (index HV = highly viscous, index SHV = very highly viscous)  
• UV curing (index UV)  
• suited for 150 µm technology  
• resistant to acid etching baths  
• fast curing and strippability  
• strippable in alkaline media  
• index FS = flake strippable |
| Etch and plating resists of the series SD 2059 UV-AL SD 2059 UV-AL, blue SD 2059 UV-AL-T, blue | • application by screen printing  
• UV curing (index UV)  
• suited for 150 µm technology  
• resistant to pH 9.5  
• very easily stripped in alkaline media (index AL)  
• index T = thixotropic |
### Product (series) Special properties

| Etch and plating resist SD 2150 UV-AL-FS, blue | application by screen printing  
| UV curing (index UV)  
| enables representation of fine conductors up to 250 µm  
| perfectly suited for flexible circuits and for roll-to-roll application  
| resistant to acid etching and plating baths  
| very easily stripped in alkaline media (index AL)  
| index FS = flake strippable |

| Wepelan plating resist SD 2154 E, blue | application by screen printing  
| air or oven drying  
| outstanding resistance over the entire pH range  
| very good resistance to cyanide baths  
| index E = elastic  
| strippable in esters, ketones and chlorinated hydrocarbons |

| Etch and plating resist SD 2155 AL, blue transparent | application by screen printing  
| suited for 150 µm technology  
| resistant to acid etching and plating baths  
| suited for electroplating ceramics  
| very easily stripped in alkaline media (index AL) |

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### 3. 1- and 2-pack ELPELECT® dielectrics

#### 3.1 General characteristics
- insulating layer in the sequential fabrication of multilayer circuits (SBU = sequential build-up technology)
- suited for laser ablation with CO2, Nd-YAG and Eximer lasers
- finest structures can be represented without any problems
- very good adhesion of the subsequent metal plating (> 10 N/cm).

#### 3.2 Product-specific characteristics

<table>
<thead>
<tr>
<th>Product (series)</th>
<th>Special properties</th>
</tr>
</thead>
</table>
| 1-pack dielectric ELPELECT® GL 2230 LA, dark-red transparent | application by curtain coating  
| laser-ablatable (index LA)  
| free of halogenated flame retardants  
| corresponds to best flame class V-0 acc. to UL 94 |

| 2-pack dielectric ELPELECT® SD 2230 LA, dark-red transparent | same as GL 2230 LA, but applied by screen printing |

### 4. Via hole fillers

#### 4.1 General characteristics
- prevent the penetration of solder to the component side and the settling of flux residues in the holes
- ensure the sealing of via holes for vacuum adaption during in-circuit testing.

See also section 10 "Plugging pastes".
4.2 Product-specific characteristics

<table>
<thead>
<tr>
<th>Product (series)</th>
<th>Special properties</th>
</tr>
</thead>
</table>
| Via hole fillers of the series SD 2361 | • application by screen printing  
SD 2361, green  
SD 2361 T, green | • safe closing of via holes  
• 100 % solids content means practically no volume shrinkage  
• the thixotropic adjustment (index T) is suited for larger holes (> 0.5 mm) |

5. 1-pack solder resists

5.1 General characteristics

- UV curing, high curing speed
- 100 % solids content, thus no drying on screen
- easy to print; can thus be processed at high squeegee/printing speeds
- low odour.

5.2 Product-specific characteristics

<table>
<thead>
<tr>
<th>Product (series)</th>
<th>Special properties</th>
</tr>
</thead>
</table>
| 1-pack solder resists of the series SD 2368 UV, transparent SD 2308 UV-SM, colourless  
SD 2358 UV-SM, blue  
SD 2368 UV-SG, green  
SD 2368 UV-SM, green  
SD 2368 UV-SG-DG, dark-green  
SD 2368 UV-SM-DG, dark-green  
SD 2368 UV-HFG, green | • application by screen printing  
• UV curing (index UV)  
• for copper conductors of up to 70 µm  
• transparent  
• perfect curing even in thicker layers  
• suited for the Hot-Air Levelling process |
| 1-pack touch-up lacquer SD 2369 UV-ABL, yellow-green transparent | • application by screen printing or brush  
• UV curing (index UV)  
• transparent lacquer for eliminating minor mechanical defects (index ABL = touch-up lacquer)  
• especially suited for all yellow-green solder resists of the series’ ELPERM® 2467 and ELPERM® 2469 |

6. Conventional and photoimageable 2-pack solder resists

6.1 General characteristics

- excellent printing properties, even in the case of high conductors
- enable so called mass soldering and selective soldering at the same time
- absolutely non-bleeding
- for rigid and flexible circuits
- low solvent content (low VOC; VOC = Volatile Organic Compound), high solids content
- excellent adhesive strength.
6.2 Special characteristics of the ELPEMER® photoimageable solder resists

- virtually vertical sidewalls enable the representation of finest structures, for instance 50 µm solder dams between SMD pads
- very short processing times
- very high processing reliability
- very low exposure energy
- aqueous-alkaline or polyalcohol developable
- approval: best flame class V-0 acc. to UL 94, Approval No. File E 80315
- meet IPC-SM-840 C and Bellcore GR 78 CORE specifications
- mould-resistant in accordance with IPC-SM-840 C, item 3.4.6, and DIN IEC 60068-2-10.

Please read the advice in our Application Information AI 2/1 (see also section 1).

6.3 Product-specific characteristics

<table>
<thead>
<tr>
<th>Product (series)</th>
<th>Special properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-pack solder resist SD 2444 NB-M, black</td>
<td>application by screen printing</td>
</tr>
<tr>
<td></td>
<td>excellent adhesive strength and resistance to soldering processes</td>
</tr>
<tr>
<td></td>
<td>approval: best flame class V-0 acc. to UL 94, Approval No. File E 80315</td>
</tr>
<tr>
<td></td>
<td>no light reflection, therefore especially suited for use in optoelectronics</td>
</tr>
<tr>
<td></td>
<td>index NB = no bleeding; M = mat</td>
</tr>
<tr>
<td>2-pack solder resists of the series SD 2457, halogen-free</td>
<td>application by screen printing</td>
</tr>
<tr>
<td>SD 2457 SM, blue, SD 2467 SM-GG, green</td>
<td>photoimageable</td>
</tr>
<tr>
<td></td>
<td>aqueous-alkaline developable</td>
</tr>
<tr>
<td></td>
<td>approval: best flame class V-0 acc. to UL 94</td>
</tr>
<tr>
<td></td>
<td>halogen-free per JPCA-ES-01-1999, residual halogen content &lt; 500 ppm</td>
</tr>
<tr>
<td></td>
<td>indices: SM = silk-mat; GG = grass-green</td>
</tr>
<tr>
<td>2-pack solder resist SD 2460 FLEX, green</td>
<td>application by screen printing</td>
</tr>
<tr>
<td></td>
<td>can already be cured at 80 °C</td>
</tr>
<tr>
<td></td>
<td>excellent adhesion to polyimide and polyester films (index FLEX = for flexible circuits)</td>
</tr>
<tr>
<td>2-pack solder resists of the series SD 2460/201 UV-FLEX</td>
<td>application by screen printing</td>
</tr>
<tr>
<td>SD 2450/201 UV-FLEX, blue, SD 2460/201 UV-FLEX, green</td>
<td>UV curing (index UV)</td>
</tr>
<tr>
<td></td>
<td>resistant to Hot-Air Levelling</td>
</tr>
<tr>
<td></td>
<td>excellent adhesion to polyimide, polycarbonate and polyester films (index FLEX = for flexible circuits)</td>
</tr>
<tr>
<td></td>
<td>suited for cross-over technology</td>
</tr>
<tr>
<td></td>
<td>approval for SD 2460/201 UV-FLEX: best flame class V-0 acc. to UL 94, Approval No. File E 80315</td>
</tr>
</tbody>
</table>
## Product (series) | Special properties
--- | ---
2-pack solder resists of the **series SD 2462 NB** and **SD 2462 NB-M**<br>SD 2402 NB, colourless<br>SD 2462 NB, green<br>SD 2462 NB-T, green<br>SD 2402 NB-M, colourless<br>SD 2432 NB-M, red<br>SD 2452 NB-M, blue<br>SD 2462 NB-M, green<br>SD 2462 NB-M-YG, yellow-green<br>SD 2452 NB-M/550, blue<br>SD 2462 NB-M/550, green | • application by screen printing<br>• outstanding definition and excellent edge coverage<br>• outstandingly high adhesive strength<br>• on account of its excellent adhesive strength SD 2462 NB-M is particularly suitable as a “top coat” in thick-copper technology (e.g. 400 µm technology) and offers highest safety for this technology (see also section 8 “thick film fillers”)<br>• excellent chemical resistance<br>• partially approval: best flame class V-0 acc. to UL 94, Approval No. File E 80315<br>• indices: NB = no bleeding; T = thixotropic; M = mat; YG = yellow-green; 550 = viscosity 550 dPas (highly viscous)

2-pack solder resists of the **series SD 2462 NB-M**<br>SD 2423 FLEX, amber<br>SD 2463 FLEX, green | • application by screen printing<br>• highly flexible, thus particularly suited for printing on flexible base materials (FLEX = for flexible circuits)<br>• photoimageable<br>• aqueous-alkaline developable<br>• approval: best flame class V-0 acc. to UL 94

2-pack solder resist **AS 2467 XM-XG**, extra dark-green | • for horizontal and vertical spraying processes (index AS = air spray)<br>• photoimageable<br>• aqueous-alkaline developable<br>• approval: best flame class V-0 acc. to UL 94<br>• indices: XM = extra-mat; XG = extra dark-green

2-pack solder resists of the **series GL 2467**<br>GL 2467 SG-DG<br>GL 2467 SG-GG<br>GL 2467 SG-YG<br>GL 2467 SM-DG<br>GL 2467 SM-GG<br>GL 2467 SM-YG | • application by curtain coating or spraying<br>• photoimageable<br>• aqueous-alkaline developable<br>• approval: best flame class V-0 acc. to UL 94<br>• available special colours: colourless, yellow, amber, red, black, blue, white<br>• indices: SG = silk-glossy; SM = silk-mat; DG = dark-green; GG = grass-green; YG = yellow-green

2-pack solder resists of the **series GL 2467**<br>GL 2467 MM-YG | • application by curtain coating<br>• photoimageable<br>• aqueous-alkaline or polyalcohol developable<br>• approval: best flame class V-0 acc. to UL 94<br>• indices: MM = medium-mat; YG = yellow-green
<table>
<thead>
<tr>
<th>Product (series)</th>
<th>Special properties</th>
</tr>
</thead>
</table>
| 2-pack solder resist SD 2467 MM-YG | • application by screen printing  
• photoimageable  
• aqueous-alkaline or polyalcohol developable  
• approval: best flame class V-0 acc. to UL 94  
• indices: MM = medium-mat; YG = yellow-green |
| 2-pack via hole fillers of the series VF 2467 VF 2467 DG VF 2467 LYG | • application by screen printing  
• photoimageable via hole filler (index VF = via hole filler)  
• aqueous-alkaline developable  
• approval: best flame class V-0 acc. to UL 94  
• indices: VF = via hole filler; DG = dark-green; LYG = light-yellow-green |
| 2-pack touch-up lacquer AL 2468 YG | • application by brush  
• yellow-green transparent lacquer for eliminating minor mechanical defects (index AL = touch-up lacquer)  
• based on the 2-pack solder resists of the series SD 2468 NB  
• index YG = yellow-green |
| 2-pack solder resists of the series SD 2468 NB and SD 2468 NB-M | • application by screen printing  
• available in various colour adjustments  
• partially approval: best flame class V-0 acc. to UL 94, Approval No. File E 80315  
• SD 2468 NB-M-HV/50 is specially suited for coating backpanels  
• indices: NB = no bleeding; M = mat  
We also draw your attention to the newer series SD 2462 NB and SD 2462 NB-M. |
| 2-pack solder resists of the series SD 2468 NB-M/21 | • application by screen printing  
• very good adhesion to metals such as Sn, Pb/Sn and Ni  
• excellent printing properties, for instance over high conductors (70 µm) and in tight conductor spaces  
• available in various colour adjustments  
• partially approval: best flame class V-0 acc. to UL 94, Approval No. File E 80315  
• indices: NB = no bleeding; M = mat |
| 2-pack solder resist GL 2469 SM, yellow-green | • application by curtain coating or spraying  
• photoimageable  
• developable in polyalcohols, preferably butylcarbitol or carbitol  
• approval: best flame class V-0 acc. to UL 94  
• index SM = silk-mat |
| 2-pack solder resist SD 2469 SM, yellow-green | • application by screen printing  
• photoimageable  
• developable in polyalcohols, preferably butylcarbitol or carbitol  
• approval: best flame class V-0 acc. to UL 94  
• index SM = silk-mat |
Product (series) | Special properties
--- | ---
2-pack solder resist SD 2494 NB-SM, white | • application by screen printing
• excellent adhesive strength
• owing to excellent resistance to yellowing and good light reflection application in optoelectronics and automobile electronics (instrument panels)
• approval: best flame class V-0 acc. to UL 94, Approbation No. File E 80315
• indices: NB = no bleeding; SM = silk-mat

7. Marking inks

7.1 General characteristics
• excellent definition
• high solids content
• outstanding covering power
• very good adhesive strength
• solder bath resistant.

7.2 Special characteristics of the ELPEMER® photoimageable marking inks
• the excellent resolution of the photoimageable ELPEMER® marking inks enable the representation of finest details
• no time- and cost-consuming fabrication of screen stencils
• aqueous-alkaline developable
• excellent colour stability even after the soldering process.

7.3 Product-specific characteristics of the 1-pack marking inks
Product (series) | Special properties
--- | ---
1-pack marking inks of the series SD 2513 UV SD 2513 UV, yellow SD 2543 UV, black SD 2593 UV, white | • application by screen printing
• UV curing (index UV)
• 100 % solids content
• short curing times
• high colour stability

7.4 Product-specific characteristics of the 2-pack marking inks
Product (series) | Special properties
--- | ---
2-pack marking inks of the series SD 2615 SD 2615, yellow SD 2615 T, yellow SD 2645, black SD 2695, white SD 2695 T, white SD 2695 HT, white | • application by screen printing
• available in various thixotropic adjustments: T = thixotropic; HT = highly thixotropic
• free of lead chromate
• fast curing
• excellent chemical resistance
• very good adhesive strength
8. Thick film fillers

8.1 General characteristics

- to fill the spaces between high traces in thick copper technology (for instance 400 µm technology)
- solvent-free
- ideal basis for the subsequent solder resist coating
- very good solder bath resistance
- flexible, thus suited for use on so-called “static flex” circuit boards (printed circuit boards that are subjected to just one or very few bending stresses, for instance during installation).

8.2 Product-specific characteristics

<table>
<thead>
<tr>
<th>Product (series)</th>
<th>Special properties</th>
</tr>
</thead>
</table>
| Thick film filler DSF 2706 UV, colourless | • application by screen or stencil printing  
• UV curing (index UV)  
• corresponds to best flame class V-0 acc. to UL 94; UL approbation has been applied for under project no. 02ME23571  
• free of halogenated flame retardants  
• proven to be the ideal “top coat” in thick-copper technology: 2-pack solder resist SD 2462 NB-M (see also page 7) |
9. **Heatsink paste**

9.1 **General characteristics**
- highly thermally conductive system for the thermal management of printed circuit boards and assemblies
- low-cost alternative to conventional heatsinks; problem-free application with existing screen printing technology
- enables the flexible configuration of varying heatsink geometries.

9.2 **Product-specific characteristics**

<table>
<thead>
<tr>
<th>Product (series)</th>
<th>Special properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-pack heatsink paste</td>
<td>• application by screen printing</td>
</tr>
<tr>
<td><strong>HSP 2741</strong>, black</td>
<td>• 100 % solids content</td>
</tr>
<tr>
<td></td>
<td>• high dielectric strength, thus no need for electrical insulation layer between pcb and heatsink</td>
</tr>
<tr>
<td></td>
<td>• <strong>approval: best flame class V-0 acc. to UL 94, Approbation No. File E 80315</strong></td>
</tr>
<tr>
<td></td>
<td>• German patent already granted, international patents pending</td>
</tr>
</tbody>
</table>

10. **Plugging pastes**

10.1 **General characteristics**
- suited for the creation of blister-free, smooth hole fillings in buried vias
- enable the application of smooth insulating layers in SBU technology
- 100 % solids content
- low coefficient of thermal expansion, no cracking or delamination of the layers applied
- metallisable
- **PP 2795-SD** for screen printing and **PP 2795** for roller coating have been awarded the best flame class V-0 in accordance with UL 94, Approbation No. File E 80315
- the plugging pastes **PP 2795-SD** and **PP 2795** are suitable for use in space electronics. These products are listed as approved materials in the NASA specification D-8208 "Spacecraft Design and Fabrication Requirements for Electronic Packaging and Cabling; Section 3.6, Printed Wiring Boards; Table 3.6-5: Acceptable Via Hole-Fill Material"
- the pluggable diameter depends on the “aspect ratio” of the plated-through holes to be filled (ratio between material thickness and via hole diameter); see also section 10.2 “Product-specific characteristics”.

10.2 **Product-specific characteristics**

<table>
<thead>
<tr>
<th>Product (series)</th>
<th>Special properties</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Plugging pastes of the series PP 2795</strong>, white</td>
<td>• application by roller coating</td>
</tr>
<tr>
<td><strong>PP 2795</strong></td>
<td>• plugging of via holes with an aspect ratio of 12</td>
</tr>
<tr>
<td><strong>PP 2795 HV</strong></td>
<td>• with the highly viscous adjustment (index HV) aspect ratios up to approx. 17 can be filled</td>
</tr>
</tbody>
</table>
Product (series) | Special properties
---|---
Plugging pastes of the series PP 2795-SD, green PP 2795-SD, light-grey | • application by screen printing (index SD = screen printing)  
• plugging of via holes with an aspect ratio of 12

11. Carbon-conductive inks

11.1 General characteristics
- excellent definition owing to high thixotropy  
- also suited for flexible base material  
- excellent adhesive strength and mechanical stability  
- resistant to Hot-Air Levelling  
- high chemical resistance  
- stable electrical resistance even after temperature and moisture stress.

11.2 Product-specific characteristics

<table>
<thead>
<tr>
<th>Product (series)</th>
<th>Special properties</th>
</tr>
</thead>
</table>
| 1-pack carbon conductive ink SD 2841 HAL-IR, black, mat, 14-20 Ω/□* | • application by screen printing  
• very smooth surface, thus suited for sliding contacts  
• particularly suited for IR drying (index IR = infrared-curable)  
• hot-air levelling resistant (index HAL)  
• can be mixed with 1-pack insulating paste SD 2801 HAL, grey, to increase resistance |

| 1-pack carbon-conductive ink SD 2843 HAL, black, mat, 13-20 Ω/□* | • application by screen printing  
• hot-air levelling resistant (index HAL)  
• high chemical and thermal resistance  
• particularly long shelf life: 6 months |

* resistance related to a square area at a layer thickness of about 25 µm

12. Peelable solder masks

12.1 General characteristics
- for the partial coverage of printed circuit boards as protection from direct contact with solder baths and as protection in plating processes  
- very high elasticity and tear resistance  
- residue-free removal before and/or after the soldering process.

Please also observe the notes in our Technical Information sheet TI 15/7 “Selection criteria and processing advice for peelable solder resists (solder masks) of the series SD 2950“ In our report manual this technical information sheet is filed under group 15.
12.2 Product-specific characteristics

<table>
<thead>
<tr>
<th>Product (series)</th>
<th>Special properties</th>
</tr>
</thead>
<tbody>
<tr>
<td>Peelable solder masks of the series <strong>SD 2950</strong></td>
<td></td>
</tr>
<tr>
<td>SD 2950, blue</td>
<td>• application by screen printing</td>
</tr>
<tr>
<td>SD 2950 T, blue</td>
<td>• unlimited pot life, as solvent-free</td>
</tr>
<tr>
<td>SD 2952, blue</td>
<td>• easy to process</td>
</tr>
<tr>
<td>SD 2952 HV, blue</td>
<td>• SD 2950/SD 2950 T: particularly suited for the Hot-Air Levelling process; cannot be peeled until after soldering</td>
</tr>
<tr>
<td>SD 2953, blue</td>
<td>• SD 2990 T: for covering carbon-conductive ink or larger holes</td>
</tr>
<tr>
<td>SD 2962 P, green</td>
<td>• SD 2962 P; SD 2962 P/300: suited as masks in electroplating and other metallising processes</td>
</tr>
<tr>
<td>SD 2962 P/300, green</td>
<td>• SD 2952; SD 2952 HV: suited for standard soldering processes, not for overprinting carbon-conductive ink</td>
</tr>
<tr>
<td>SD 2990 T, white</td>
<td>• SD 2953: same as SD 2952, but with a higher thixotropy</td>
</tr>
<tr>
<td>SD 2962 P; SD 2962 P/300</td>
<td>• indices: $T = \text{thixotropic;}$ $HV = \text{highly viscous;}$ $300 = \text{viscosity of 300 dPas;}$ $P = \text{pigmented}$</td>
</tr>
<tr>
<td><strong>SD 2954</strong>, blue transparent</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• application by screen printing</td>
</tr>
<tr>
<td></td>
<td>• peelable before and after soldering</td>
</tr>
<tr>
<td></td>
<td>• very high thermal stability, multiple soldering possible</td>
</tr>
<tr>
<td></td>
<td>• particularly suited for use in reflow soldering (SMD technology)</td>
</tr>
</tbody>
</table>

Any questions?

We would be pleased to offer you advice and assistance in solving your problems. Free samples and technical literature are available upon request.

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