



## Test Report

No.: CANEC25030712707

Date: Dec 18, 2025

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Client Name: YANGZHOU YANGJIE ELECTRONIC TECHNOLOGY CO.,LTD

Client Address: NO.68, WEST NEW GANQUAN ROAD, WEIYANG ECONOMIC DEVELOPMENT ZONE,  
HANJIANG DISTRICT, YANGZHOU, JIANGSU, CHINA

Sample Name: Small Signal Pb Free

Client Ref. Information: 1.Tin ball 7.Molding Compound halogen Free 2 27.Copper Wire 28.Au  
Flashed Pd Copper Wire 29.Pd Copper Wire 30.Silver Paste 31.Lead  
Frame(Cu Fe Ag) 32.Lead Frame(Cu Sn Ag) 33.Lead Frame Fe Ni  
34.Molding Compound halogen Free 5 36.Molding Compound halogen  
Free 6 37.Molding Compound halogen Free 7 41.Molding Compound  
halogen Free 11 42.Lead Frame Cu Ag)1 44.Lead Frame Cu  
Ag)2 49.Molding Compound halogen Free14

The above sample(s) and information were provided by the client.

SGS Job No.: GZP25-034879

Reference No.: SHP25-041836

Sample Receiving Date: Dec 09, 2025

Testing Period: Dec 09, 2025 ~ Dec 15, 2025

Test Requested: Select test(s) as requested by the client.

Test Method(s): Please refer to next page(s).

Test Result(s): Please refer to next page(s).

| Test Requirement                                                                                                                                                                                                                                                                                                          | Conclusion |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU - Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP) | Pass       |

Signed for and on behalf of  
SGS-CSTC Standards Technical Services Co., Ltd. Guangzhou Branch

Violet Shi  
Approved Signatory





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### Test Result(s):

#### Test Part Description

| SN ID | Sample No. | SGS Sample ID           | Description                  |
|-------|------------|-------------------------|------------------------------|
| SN1   | A1         | CAN25-0307127-0001.C001 | Silvery metal                |
| SN2   | A7         | CAN25-0307127-0001.C007 | Grey solid                   |
| SN3   | A27        | CAN25-0307127-0001.C027 | Copper-colored metal wire    |
| SN4   | A28        | CAN25-0307127-0001.C028 | Silver-grey metal wire       |
| SN5   | A29        | CAN25-0307127-0001.C029 | Silver-grey metal wire       |
| SN6   | A30        | CAN25-0307127-0001.C030 | Silvery paste                |
| SN7   | A31        | CAN25-0307127-0001.C031 | Copper-colored/silvery metal |
| SN8   | A32        | CAN25-0307127-0001.C032 | Copper-colored/silvery metal |
| SN9   | A33        | CAN25-0307127-0001.C033 | Silvery metal                |
| SN10  | A34        | CAN25-0307127-0001.C034 | Grey solid                   |
| SN11  | A36        | CAN25-0307127-0001.C036 | Grey solid                   |
| SN12  | A37        | CAN25-0307127-0001.C037 | Grey solid                   |
| SN13  | A41        | CAN25-0307127-0001.C041 | Grey solid                   |
| SN14  | A42        | CAN25-0307127-0001.C042 | Copper-colored metal         |
| SN15  | A44        | CAN25-0307127-0001.C044 | Copper-colored/silvery metal |
| SN16  | A49        | CAN25-0307127-0001.C049 | Grey solid                   |

#### Remarks:

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = Method Detection Limit
- (3) ND = Not Detected (< MDL)
- (4) "-" = Not Regulated

**EU RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU - Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBB), Polybrominated diphenyl ethers (PBDE), Bis(2-ethylhexyl) phthalate (DEHP), Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) and Diisobutyl phthalate (DIBP)**

**Test Method:** With reference to IEC 62321-4:2013+AMD1:2017, IEC 62321-5:2013, IEC 62321-7-2:2017 and IEC 62321-12:2023, analysis was performed by ICP-OES/AAS, UV-Vis and GC-MS.

| Test Item(s)                       | Limit | Unit(s) | MDL | A7 | A34 | A36 |
|------------------------------------|-------|---------|-----|----|-----|-----|
| Lead (Pb)                          | 1000  | mg/kg   | 2   | ND | ND  | ND  |
| Mercury (Hg)                       | 1000  | mg/kg   | 2   | ND | ND  | ND  |
| Cadmium (Cd)                       | 100   | mg/kg   | 2   | ND | ND  | ND  |
| Hexavalent Chromium (Cr(VI))       | 1000  | mg/kg   | 8   | ND | ND  | ND  |
| Polybrominated biphenyls (PBB)     | 1000  | mg/kg   | -   | ND | ND  | ND  |
| Monobrominated biphenyl (MonoBB)   | -     | mg/kg   | 25  | ND | ND  | ND  |
| Dibrominated biphenyl (DiBB)       | -     | mg/kg   | 25  | ND | ND  | ND  |
| Tribrominated biphenyl (TriBB)     | -     | mg/kg   | 25  | ND | ND  | ND  |
| Tetrabrominated biphenyl (TetraBB) | -     | mg/kg   | 25  | ND | ND  | ND  |
| Pentabrominated biphenyl (PentaBB) | -     | mg/kg   | 25  | ND | ND  | ND  |



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| Test Item(s)                              | Limit | Unit(s) | MDL | A7 | A34 | A36 |
|-------------------------------------------|-------|---------|-----|----|-----|-----|
| Hexabrominated biphenyl (HexaBB)          | -     | mg/kg   | 25  | ND | ND  | ND  |
| Heptabrominated biphenyl (HeptaBB)        | -     | mg/kg   | 25  | ND | ND  | ND  |
| Octabrominated biphenyl (OctaBB)          | -     | mg/kg   | 25  | ND | ND  | ND  |
| Nonabrominated biphenyl (NonaBB)          | -     | mg/kg   | 25  | ND | ND  | ND  |
| Decabrominated biphenyl (DecaBB)          | -     | mg/kg   | 25  | ND | ND  | ND  |
| Polybrominated diphenyl ethers (PBDE)     | 1000  | mg/kg   | -   | ND | ND  | ND  |
| Monobrominated diphenyl ether (MonoBDE)   | -     | mg/kg   | 25  | ND | ND  | ND  |
| Dibrominated diphenyl ether (DiBDE)       | -     | mg/kg   | 25  | ND | ND  | ND  |
| Tribrominated diphenyl ether (TriBDE)     | -     | mg/kg   | 25  | ND | ND  | ND  |
| Tetrabrominated diphenyl ether (TetraBDE) | -     | mg/kg   | 25  | ND | ND  | ND  |
| Pentabrominated diphenyl ether (PentaBDE) | -     | mg/kg   | 25  | ND | ND  | ND  |
| Hexabrominated diphenyl ether (HexaBDE)   | -     | mg/kg   | 25  | ND | ND  | ND  |
| Heptabrominated diphenyl ether (HeptaBDE) | -     | mg/kg   | 25  | ND | ND  | ND  |
| Octabrominated diphenyl ether (OctaBDE)   | -     | mg/kg   | 25  | ND | ND  | ND  |
| Nonabrominated diphenyl ether (NonaBDE)   | -     | mg/kg   | 25  | ND | ND  | ND  |
| Decabrominated diphenyl ether (DecaBDE)   | -     | mg/kg   | 25  | ND | ND  | ND  |
| Bis(2-ethylhexyl) phthalate (DEHP)        | 1000  | mg/kg   | 50  | ND | ND  | ND  |
| Butyl benzyl phthalate (BBP)              | 1000  | mg/kg   | 50  | ND | ND  | ND  |
| Dibutyl Phthalate (DBP)                   | 1000  | mg/kg   | 50  | ND | ND  | ND  |
| Diisobutyl Phthalate (DIBP)               | 1000  | mg/kg   | 50  | ND | ND  | ND  |

| Test Item(s)                     | Limit | Unit(s) | MDL | A37 | A41 | A49 |
|----------------------------------|-------|---------|-----|-----|-----|-----|
| Lead (Pb)                        | 1000  | mg/kg   | 2   | ND  | ND  | ND  |
| Mercury (Hg)                     | 1000  | mg/kg   | 2   | ND  | ND  | ND  |
| Cadmium (Cd)                     | 100   | mg/kg   | 2   | ND  | ND  | ND  |
| Hexavalent Chromium (Cr(VI))     | 1000  | mg/kg   | 8   | ND  | ND  | ND  |
| Polybrominated biphenyls (PBB)   | 1000  | mg/kg   | -   | ND  | ND  | ND  |
| Monobrominated biphenyl (MonoBB) | -     | mg/kg   | 25  | ND  | ND  | ND  |
| Dibrominated biphenyl (DiBB)     | -     | mg/kg   | 25  | ND  | ND  | ND  |
| Tribrominated biphenyl (TriBB)   | -     | mg/kg   | 25  | ND  | ND  | ND  |





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**Test Method:** With reference to IEC 62321-4:2013+AMD1:2017, IEC 62321-5:2013, IEC 62321-7-1:2015 and IEC 62321-12:2023, analysis was performed by ICP-OES/AAS, UV-Vis and GC-MS.

| Test Item(s)                              | Limit | Unit(s)            | MDL  | A1 | A27 | A28 |
|-------------------------------------------|-------|--------------------|------|----|-----|-----|
| Lead (Pb)                                 | 1000  | mg/kg              | 2    | 37 | 9   | ND  |
| Mercury (Hg)                              | 1000  | mg/kg              | 2    | ND | ND  | ND  |
| Cadmium (Cd)                              | 100   | mg/kg              | 2    | ND | ND  | ND  |
| Hexavalent Chromium (Cr(VI)) ▼            | -     | µg/cm <sup>2</sup> | 0.10 | ND | ND  | ND  |
| Polybrominated biphenyls (PBB)            | 1000  | mg/kg              | -    | ND | ND  | ND  |
| Monobrominated biphenyl (MonoBB)          | -     | mg/kg              | 25   | ND | ND  | ND  |
| Dibrominated biphenyl (DiBB)              | -     | mg/kg              | 25   | ND | ND  | ND  |
| Tribrominated biphenyl (TriBB)            | -     | mg/kg              | 25   | ND | ND  | ND  |
| Tetrabrominated biphenyl (TetraBB)        | -     | mg/kg              | 25   | ND | ND  | ND  |
| Pentabrominated biphenyl (PentaBB)        | -     | mg/kg              | 25   | ND | ND  | ND  |
| Hexabrominated biphenyl (HexaBB)          | -     | mg/kg              | 25   | ND | ND  | ND  |
| Heptabrominated biphenyl (HeptaBB)        | -     | mg/kg              | 25   | ND | ND  | ND  |
| Octabrominated biphenyl (OctaBB)          | -     | mg/kg              | 25   | ND | ND  | ND  |
| Nonabrominated biphenyl (NonaBB)          | -     | mg/kg              | 25   | ND | ND  | ND  |
| Decabrominated biphenyl (DecaBB)          | -     | mg/kg              | 25   | ND | ND  | ND  |
| Polybrominated diphenyl ethers (PBDE)     | 1000  | mg/kg              | -    | ND | ND  | ND  |
| Monobrominated diphenyl ether (MonoBDE)   | -     | mg/kg              | 25   | ND | ND  | ND  |
| Dibrominated diphenyl ether (DiBDE)       | -     | mg/kg              | 25   | ND | ND  | ND  |
| Tribrominated diphenyl ether (TriBDE)     | -     | mg/kg              | 25   | ND | ND  | ND  |
| Tetrabrominated diphenyl ether (TetraBDE) | -     | mg/kg              | 25   | ND | ND  | ND  |
| Pentabrominated diphenyl ether (PentaBDE) | -     | mg/kg              | 25   | ND | ND  | ND  |
| Hexabrominated diphenyl ether (HexaBDE)   | -     | mg/kg              | 25   | ND | ND  | ND  |
| Heptabrominated diphenyl ether (HeptaBDE) | -     | mg/kg              | 25   | ND | ND  | ND  |
| Octabrominated diphenyl ether (OctaBDE)   | -     | mg/kg              | 25   | ND | ND  | ND  |
| Nonabrominated diphenyl ether (NonaBDE)   | -     | mg/kg              | 25   | ND | ND  | ND  |
| Decabrominated diphenyl ether (DecaBDE)   | -     | mg/kg              | 25   | ND | ND  | ND  |
| Bis(2-ethylhexyl) phthalate (DEHP)        | 1000  | mg/kg              | 50   | ND | ND  | ND  |

Unless otherwise agreed in writing, this document is issued by the Company subject to its General Conditions.

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| Test Item(s)                            | Limit | Unit(s) | MDL | A29 | A31 | A32 |
|-----------------------------------------|-------|---------|-----|-----|-----|-----|
| Decabrominated diphenyl ether (DecaBDE) | -     | mg/kg   | 25  | ND  | ND  | ND  |
| Bis(2-ethylhexyl) phthalate (DEHP)      | 1000  | mg/kg   | 50  | ND  | ND  | ND  |
| Butyl benzyl phthalate (BBP)            | 1000  | mg/kg   | 50  | ND  | ND  | ND  |
| Dibutyl Phthalate (DBP)                 | 1000  | mg/kg   | 50  | ND  | ND  | ND  |
| Diisobutyl Phthalate (DIBP)             | 1000  | mg/kg   | 50  | ND  | ND  | ND  |

| Test Item(s)                              | Limit | Unit(s)            | MDL  | A33 | A42 | A44 |
|-------------------------------------------|-------|--------------------|------|-----|-----|-----|
| Lead (Pb)                                 | 1000  | mg/kg              | 2    | ND  | 12  | ND  |
| Mercury (Hg)                              | 1000  | mg/kg              | 2    | ND  | ND  | ND  |
| Cadmium (Cd)                              | 100   | mg/kg              | 2    | ND  | ND  | ND  |
| Hexavalent Chromium (Cr(VI)) ▼            | -     | µg/cm <sup>2</sup> | 0.10 | ND  | ND  | ND  |
| Polybrominated biphenyls (PBB)            | 1000  | mg/kg              | -    | ND  | ND  | ND  |
| Monobrominated biphenyl (MonoBB)          | -     | mg/kg              | 25   | ND  | ND  | ND  |
| Dibrominated biphenyl (DiBB)              | -     | mg/kg              | 25   | ND  | ND  | ND  |
| Tribrominated biphenyl (TriBB)            | -     | mg/kg              | 25   | ND  | ND  | ND  |
| Tetrabrominated biphenyl (TetraBB)        | -     | mg/kg              | 25   | ND  | ND  | ND  |
| Pentabrominated biphenyl (PentaBB)        | -     | mg/kg              | 25   | ND  | ND  | ND  |
| Hexabrominated biphenyl (HexaBB)          | -     | mg/kg              | 25   | ND  | ND  | ND  |
| Heptabrominated biphenyl (HeptaBB)        | -     | mg/kg              | 25   | ND  | ND  | ND  |
| Octabrominated biphenyl (OctaBB)          | -     | mg/kg              | 25   | ND  | ND  | ND  |
| Nonabrominated biphenyl (NonaBB)          | -     | mg/kg              | 25   | ND  | ND  | ND  |
| Decabrominated biphenyl (DecaBB)          | -     | mg/kg              | 25   | ND  | ND  | ND  |
| Polybrominated diphenyl ethers (PBDE)     | 1000  | mg/kg              | -    | ND  | ND  | ND  |
| Monobrominated diphenyl ether (MonoBDE)   | -     | mg/kg              | 25   | ND  | ND  | ND  |
| Dibrominated diphenyl ether (DiBDE)       | -     | mg/kg              | 25   | ND  | ND  | ND  |
| Tribrominated diphenyl ether (TriBDE)     | -     | mg/kg              | 25   | ND  | ND  | ND  |
| Tetrabrominated diphenyl ether (TetraBDE) | -     | mg/kg              | 25   | ND  | ND  | ND  |
| Pentabrominated diphenyl ether (PentaBDE) | -     | mg/kg              | 25   | ND  | ND  | ND  |
| Hexabrominated diphenyl ether (HexaBDE)   | -     | mg/kg              | 25   | ND  | ND  | ND  |
| Heptabrominated diphenyl ether (HeptaBDE) | -     | mg/kg              | 25   | ND  | ND  | ND  |



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| Test Item(s)                            | Limit | Unit(s) | MDL | A33 | A42 | A44 |
|-----------------------------------------|-------|---------|-----|-----|-----|-----|
| Octabrominated diphenyl ether (OctaBDE) | -     | mg/kg   | 25  | ND  | ND  | ND  |
| Nonabrominated diphenyl ether (NonaBDE) | -     | mg/kg   | 25  | ND  | ND  | ND  |
| Decabrominated diphenyl ether (DecaBDE) | -     | mg/kg   | 25  | ND  | ND  | ND  |
| Bis(2-ethylhexyl) phthalate (DEHP)      | 1000  | mg/kg   | 50  | ND  | ND  | ND  |
| Butyl benzyl phthalate (BBP)            | 1000  | mg/kg   | 50  | ND  | ND  | ND  |
| Dibutyl Phthalate (DBP)                 | 1000  | mg/kg   | 50  | ND  | ND  | ND  |
| Diisobutyl Phthalate (DIBP)             | 1000  | mg/kg   | 50  | ND  | ND  | ND  |

### Notes:

- (1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863.
- (2) IEC 62321 series is equivalent to EN 62321 series.
- (3) ▼ = a. The sample is positive for Cr(VI) if the Cr(VI) concentration is greater than 0.13 µg/cm<sup>2</sup>. The sample coating is considered to contain Cr(VI).  
b. The sample is negative for Cr(VI) if Cr(VI) is ND (concentration less than 0.10 µg/cm<sup>2</sup>). The coating is considered a non-Cr(VI) based coating.  
c. The result between 0.10 µg/cm<sup>2</sup> and 0.13 µg/cm<sup>2</sup> is considered to be inconclusive-unavoidable coating variations may influence the determination.





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| Test Item(s)                              | Limit | Unit(s) | MDL | A30 |
|-------------------------------------------|-------|---------|-----|-----|
| Tribrominated diphenyl ether (TriBDE)     | -     | mg/kg   | 25  | ND  |
| Tetrabrominated diphenyl ether (TetraBDE) | -     | mg/kg   | 25  | ND  |
| Pentabrominated diphenyl ether (PentaBDE) | -     | mg/kg   | 25  | ND  |
| Hexabrominated diphenyl ether (HexaBDE)   | -     | mg/kg   | 25  | ND  |
| Heptabrominated diphenyl ether (HeptaBDE) | -     | mg/kg   | 25  | ND  |
| Octabrominated diphenyl ether (OctaBDE)   | -     | mg/kg   | 25  | ND  |
| Nonabrominated diphenyl ether (NonaBDE)   | -     | mg/kg   | 25  | ND  |
| Decabrominated diphenyl ether (DecaBDE)   | -     | mg/kg   | 25  | ND  |
| Bis(2-ethylhexyl) phthalate (DEHP)        | 1000  | mg/kg   | 50  | ND  |
| Butyl benzyl phthalate (BBP)              | 1000  | mg/kg   | 50  | ND  |
| Dibutyl Phthalate (DBP)                   | 1000  | mg/kg   | 50  | ND  |
| Diisobutyl Phthalate (DIBP)               | 1000  | mg/kg   | 50  | ND  |

### Notes:

- (1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863.
- (2) IEC 62321 series is equivalent to EN 62321 series.
- (3) The restriction of DEHP, BBP, DBP and DIBP shall apply to medical devices, including in vitro medical devices, and monitoring and control instruments, including industrial monitoring and control instruments, from 22 July 2021.

Unless otherwise stated, the decision rule for conformity reporting is based on Binary Statement for Simple Acceptance Rule ( $w=0$ ) stated in ILAC-G8:09/2019.



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**ATTACHMENTS**

**Elements Testing Flow Chart**

These samples were dissolved totally by pre-conditioning method according to below flow chart.



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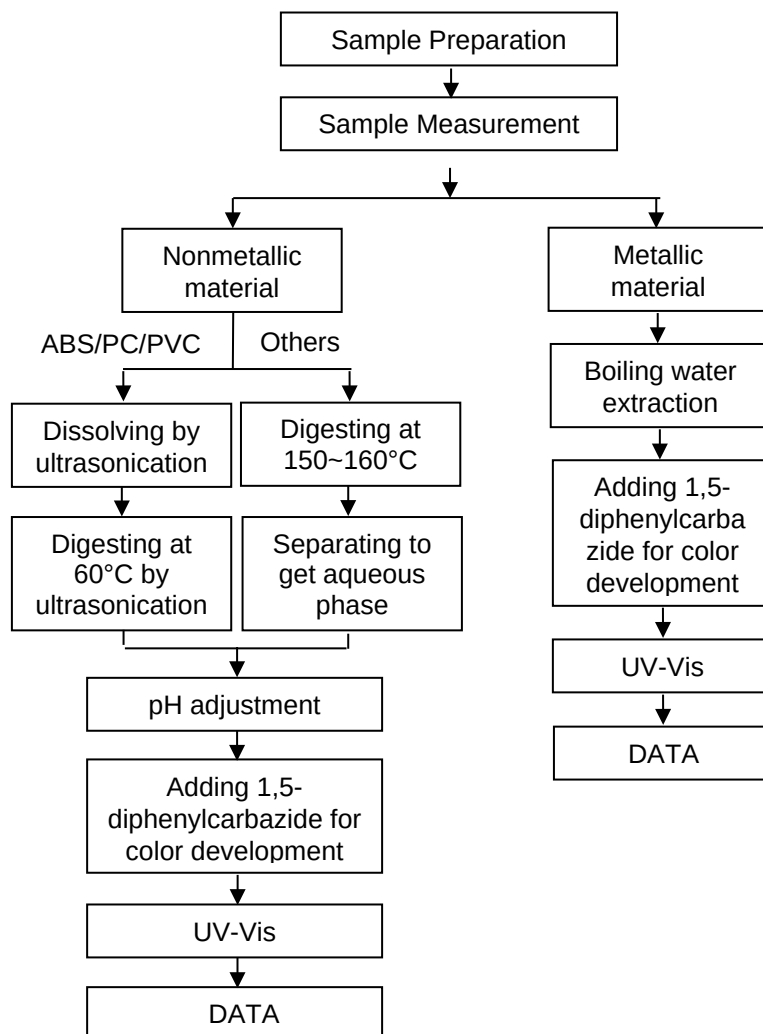
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## Hexavalent Chromium (Cr(VI)) Testing Flow Chart





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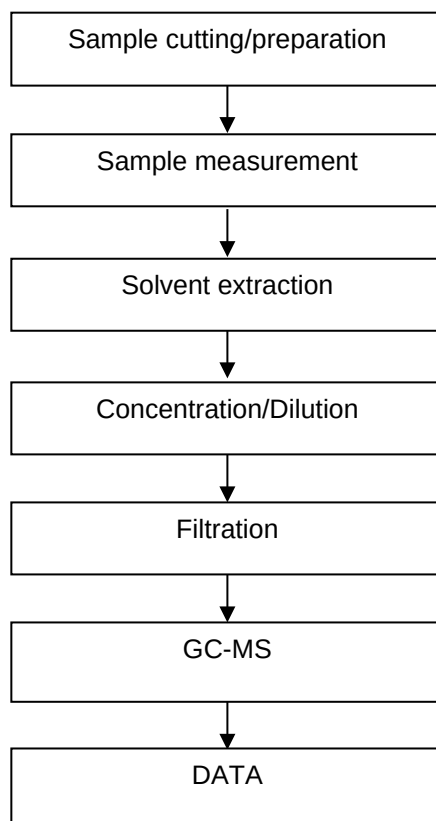
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### PBB(s)/PBDE(s)/Phthalates Testing Flow Chart





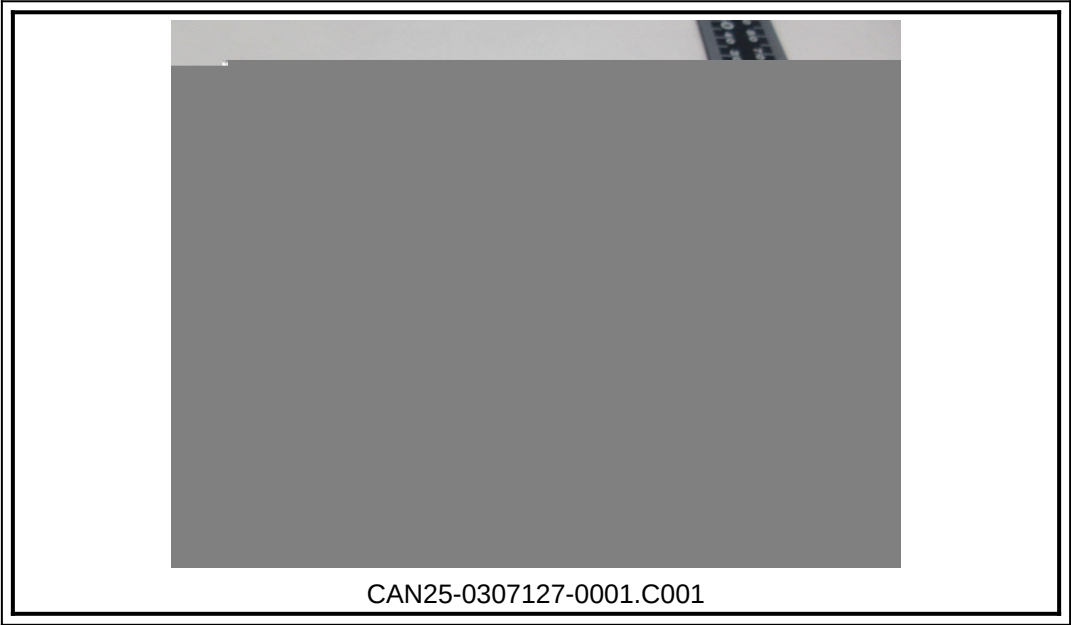
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**Sample Photo:**



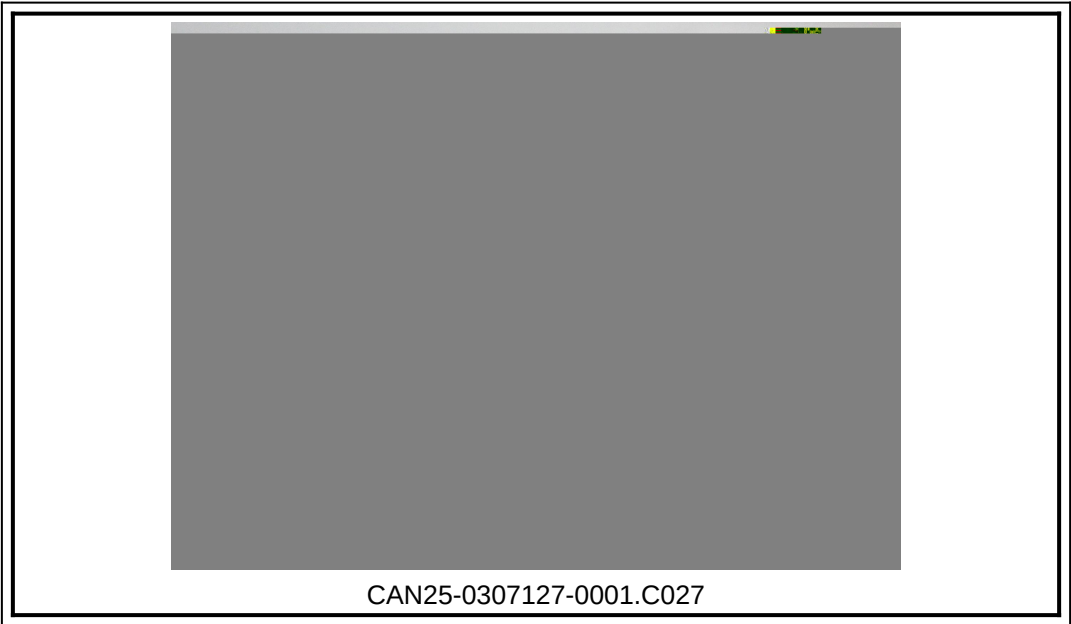
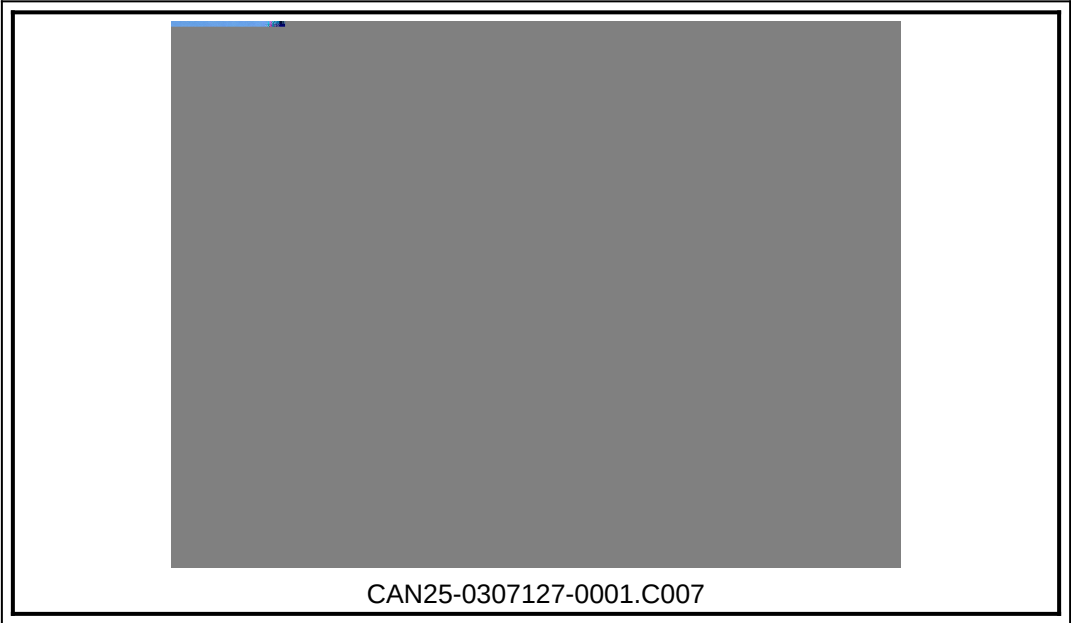


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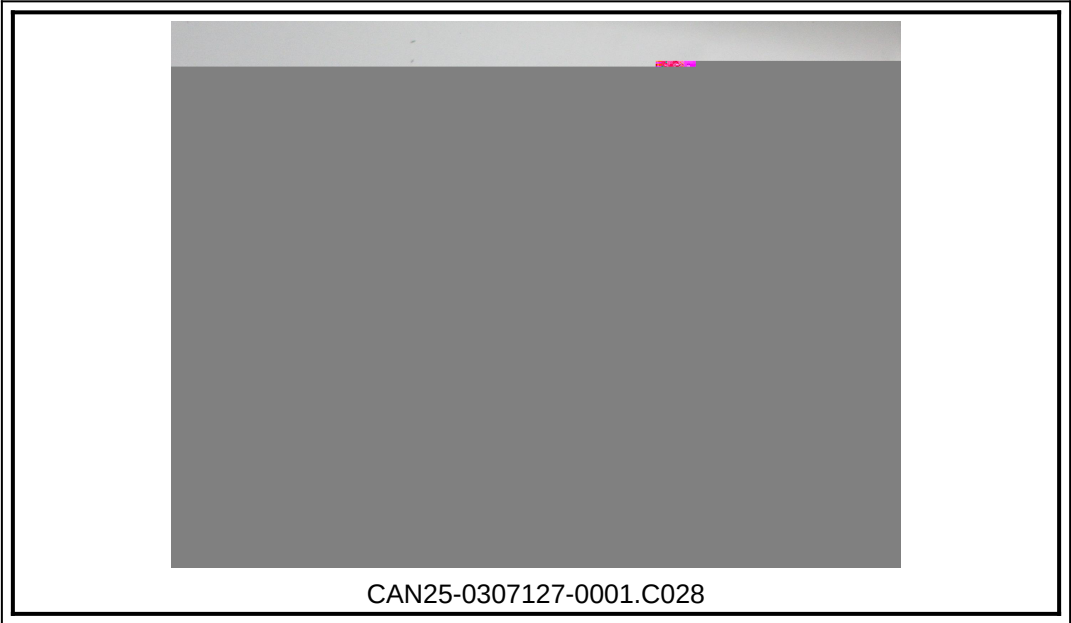


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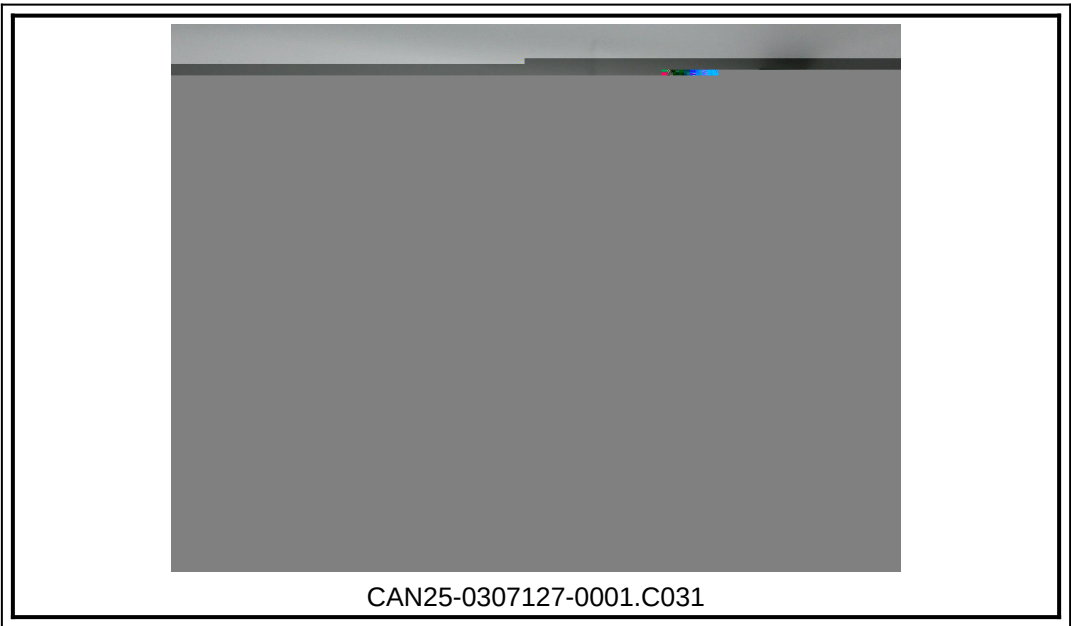
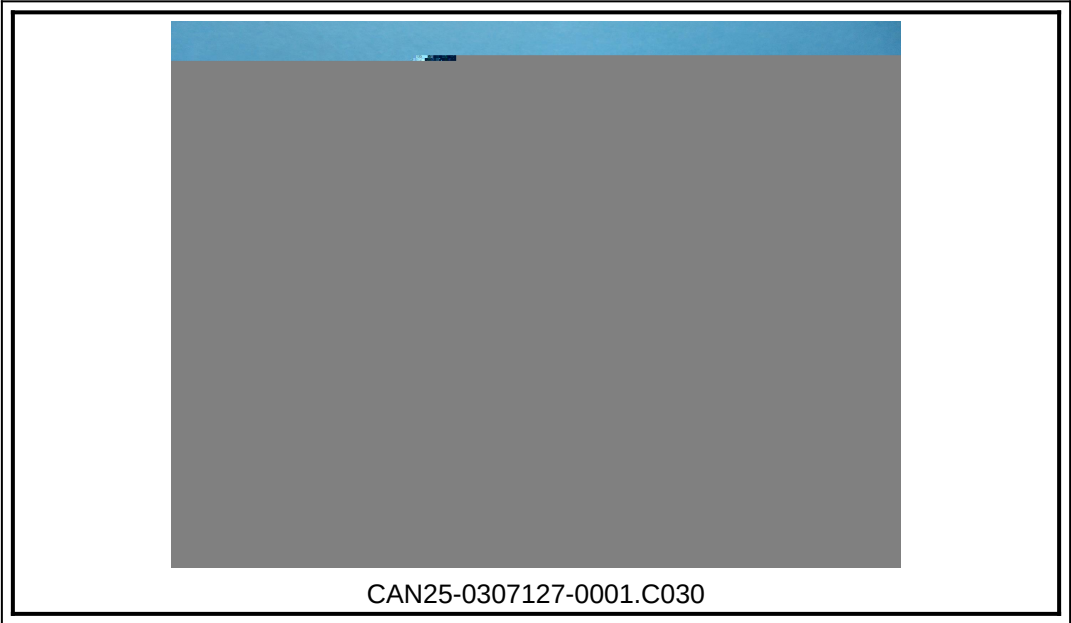


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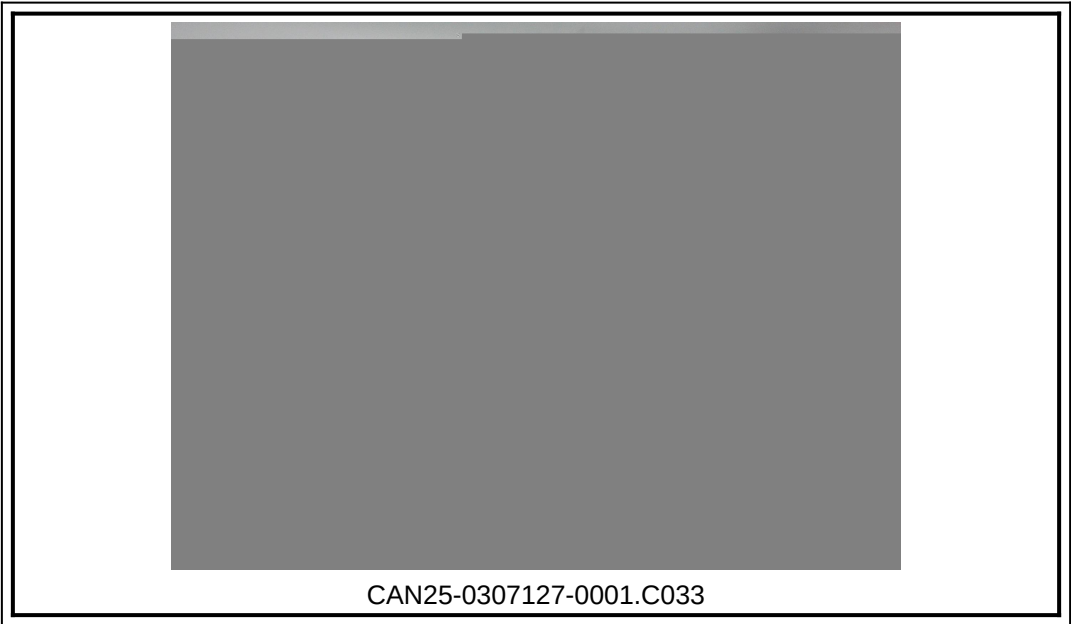
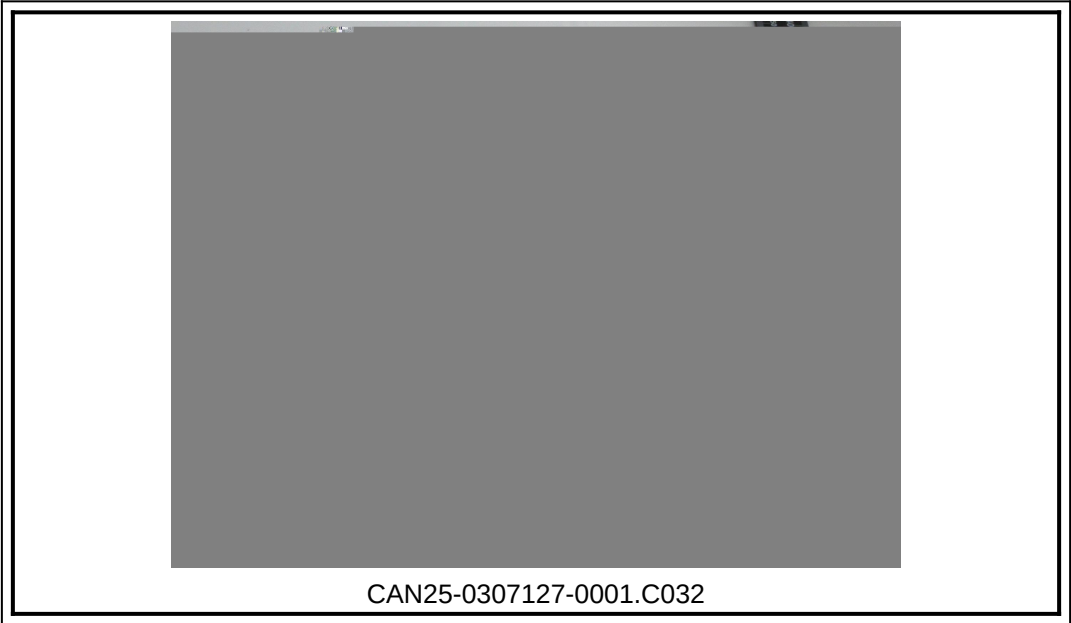


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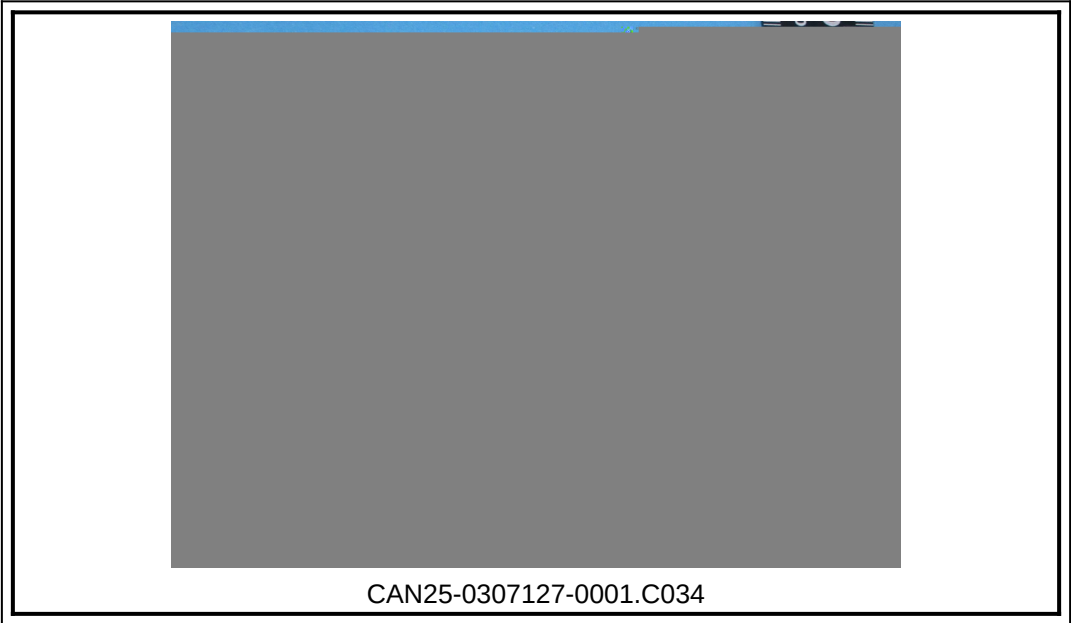
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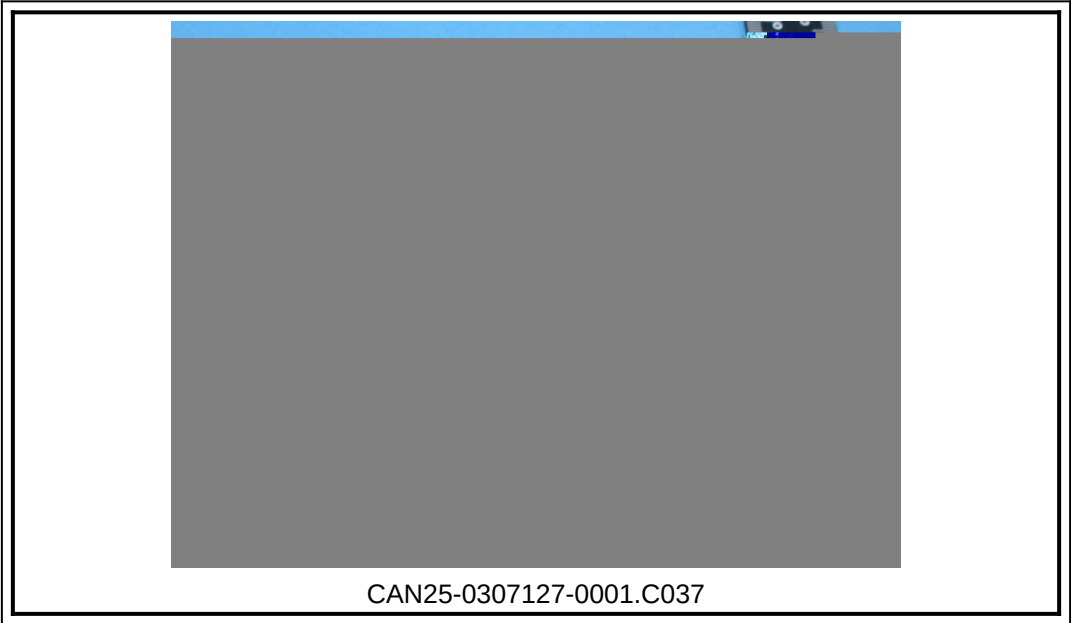
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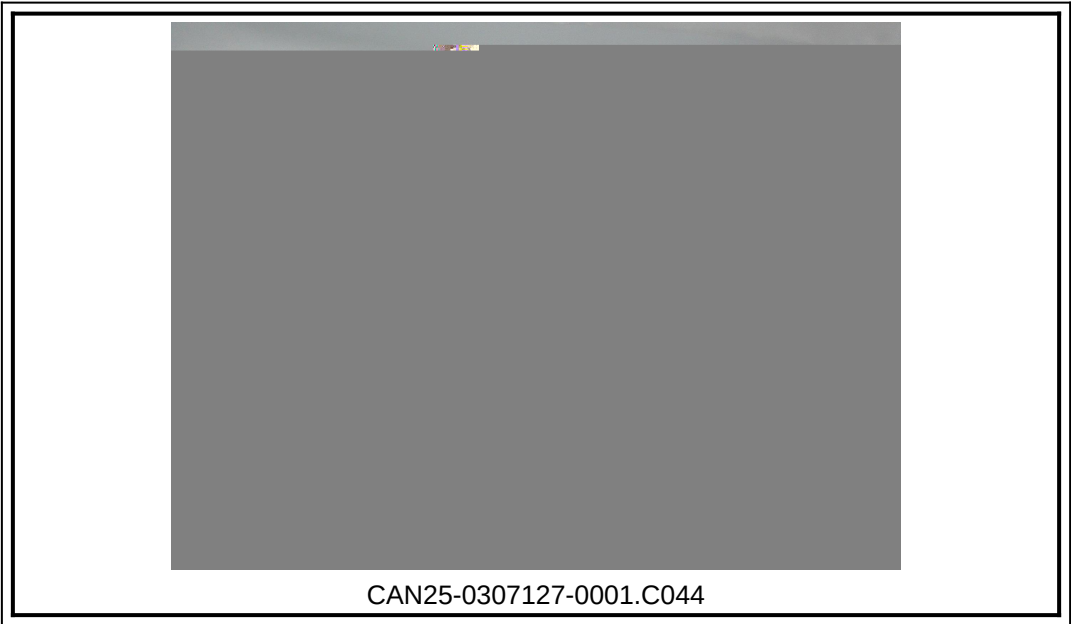
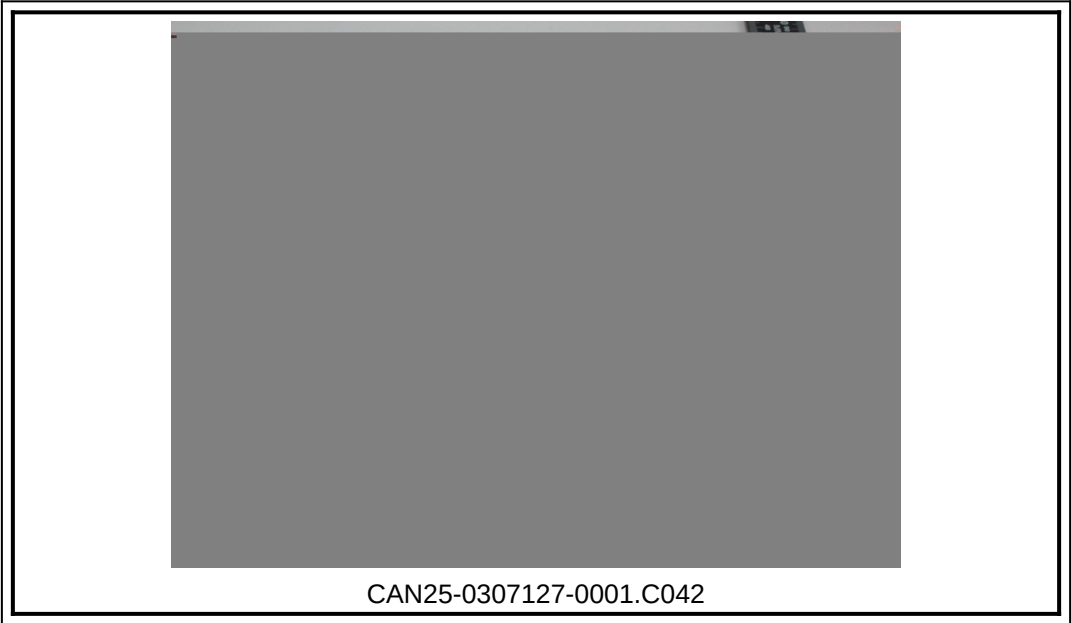


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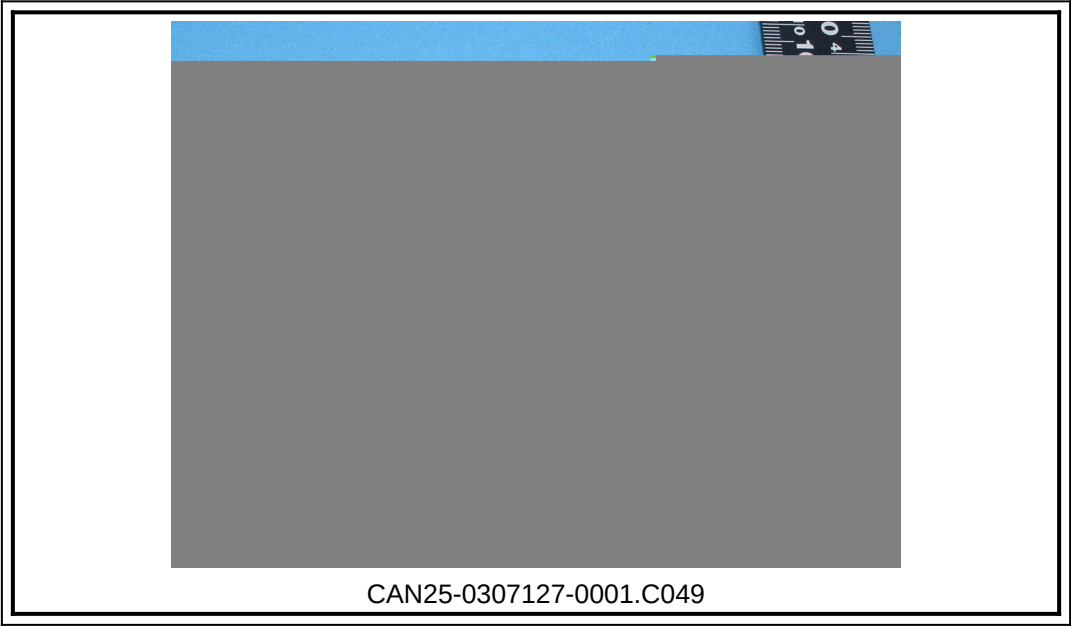


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\*\*\* End of Report \*\*\*