# Test Report (SVHC)



Client Name: FOSHAN BLUE ROCKET ELECTRONICS CO.,LTD.

Client Address: NO.45 GUXIN ROAD,CHANCHENG DISTRICT,FOSHAN,GUANGDONG,P.R.C.

| | |
|---|---|
| Sample Name: | TO-220 Semiconductor Device (Solder Bonding) |
| Model No.: | TO-220 |
| Client Ref. Information: | TO-263、TO-262、TO-220F、TO-220FL |

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

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|---|---|
| SGS Job No.: | GZP24-037865 |
| Sample Receiving Date: | Nov 22, 2024 |
| Testing Period: | Nov 22, 2024 ~ Nov 28, 2024 |
| Test Requested: | As requested by client, SVHC in Candidate List screening is performed according to: (i) Sixty two (62) inorganic substances and additional eleven (11) organic metallic substances in the Candidate List of Substances of Very High Concern (SVHC) for authorization published by European Chemicals Agency (ECHA) on and before Nov 07, 2024 regarding Regulation (EC) No 1907/2006 concerning the REACH. As requested by client, SVHC in Candidate List screening is performed according to:<br>(i) Two hundred and forty two (242) substances in the Candidate List of Substances of Very High Concern (SVHC) for authorization published by European Chemicals Agency (ECHA) on and before Nov 07, 2024 regarding Regulation (EC) No 1907/2006 concerning the REACH.<br>As requested by client, Potential SVHC screening is performed according to: (i) One (1) potential Substances of Very High Concern (SVHC) in the Intention List published by European Chemicals Agency (ECHA) regarding Regulation (EC) No 1907/2006 concerning the REACH. As requested by client, Potential SVHC screening is performed according to:<br>(i) Six (6) substances in the Public Consultation List of potential Substances of Very High Concern (SVHC) published by European Chemicals Agency (ECHA) on and before Aug 30, 2024 regarding Regulation (EC) No 1907/2006 concerning the REACH.<br>(ii) One (1) potential Substances of Very High Concern (SVHC) in the Identification ongoing.<br>(iii) Six (6) potential Substances of Very High Concern (SVHC) in the Intention |

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

Jessie Li

Jessie-JX Li
Approved Signatory

scan to see the report

B0F44199



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List published by European Chemicals Agency (ECHA) regarding Regulation (EC) No 1907/2006 concerning the REACH.

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

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

**Summary:**

| | |
|---|---|
| According to the specified scope and evaluation screening, the results of 73 SVHC in the Candidate List are ≤ 0.1% (w/w) in the submitted sample. | Pass |
| According to the specified scope and evaluation screening, the results of 242 SVHC in the Candidate List are > 0.1% (w/w) in the submitted sample. See Test Result ID 001. | See remark 2 for obligation under REACH |
| According to the specified scope and evaluation screening, the results of 1 Potential SVHC are ≤ 0.1% (w/w) in the submitted sample. | Pass |
| According to the specified scope and evaluation screening, the results of 13 Potential SVHC are ≤ 0.1% (w/w) in the submitted sample. | Pass |



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The test results of SVHC over Limit in the articles of the submitted sample summary

| Test Result ID | Batch | Description | Substance Name | CAS No. | Concentration (%) |
|---|---|---|---|---|---|
| 001 | XIX | Black body | Lead | 7439-92-1 | 0.257 |



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**Remark :**

1. The chemical analysis of specified SVHC is performed by means of currently available analytical techniques against the following SVHC related documents published by ECHA:
   http://echa.europa.eu/web/guest/candidate-list-table
   These lists are under evaluation by ECHA and may subject to change in the future.
2. REACH obligation:
   2.1 Concerning article(s):
   Communication:
   Article 33 of Regulation (EC) No 1907/2006 requires supplier of an article containing a substance meeting the criteria in Article 57 and identified in accordance with Article 59(1) in a concentration above 0.1% weight by weight (w/w) shall provide the recipient of the article with sufficient information, available to the supplier, to allow safe use of the article including, as a minimum, the name of that substance in the Candidate List.

   Notification:
   In accordance with Regulation (EC) No 1907/2006, any EU producer or importer of articles shall notify ECHA, in accordance with paragraph 4 of Article 7, if a substance meets the criteria in Article 57 and is identified in accordance with Article 59(1) of the Regulation, if (a) the substance in the Candidate List is present in those articles in quantities totaling over one tonne per producer or importer per year; and (b) the substance in the Candidate List is present in those articles above a concentration of 0.1% weight by weight (w/w).

   Companies supplying articles containing substances of very high concern (SVHCs) on the Candidate List in a concentration above 0.1% weight by weight (w/w) on the EU market must comply with the Waste Framework Directive 2008/98/EC requirement and submit SCIP notifications on these articles to ECHA, as from 5 January 2021.

   2.2 Concerning material(s):
   Test results in this report are based on the tested sample. This report refers to testing result of tested sample submitted as homogenous material(s). In case such material is being used to compose an article, the results indicated in this report may not represent SVHC concentration in such article. If this report refers to testing result of composite material group by equal weight proportion, the material in each composite test group may come from more than one article.

   If the sample is a substance or mixture, and it directly exports to EU, client has the obligation to comply with the supply chain communication obligation under Article 31 of Regulation (EC) No. 1907/2006 and the conditions of Authorization of substance of very high concern included in the Annex XIV of the Regulation (EC) No. 1907/2006.

   2.3 Concerning substance and preparation:
   If a SVHC is found over 0.1% (w/w) and/or the specific concentration limit which is set in Regulation (EC) No 1272/2008 and its amendments, client is suggested to prepare a Safety Data Sheet (SDS) against the SVHC to comply with the supply chain communication obligation under Regulation (EC) No 1907/2006, in which:
   - a substance that is classified as hazardous under the CLP Regulation (EC) No 1272/2008.
   - a mixture that is classified as hazardous under the CLP Regulation (EC) No 1272/2008, when it contains a substance with concentration equal to, or greater than the classification limit as set in Regulation (EC) No. 1272/2008; or
   - a mixture is not classified as hazardous under the CLP Regulation (EC) No 1272/2008, but contains either:

(a) a substance posing human health or environmental hazards in an individual concentration of ≥ 1 % by weight for mixtures that are solid or liquids (i.e., non-gaseous mixtures) or ≥ 0.2 % by volume for gaseous mixtures; or
(b) a substance that is PBT, or vPvB in an individual concentration of ≥ 0.1 % by weight for mixtures that are solid or liquids (i.e., non-gaseous mixtures); or
(c) a substance on the SVHC candidate list (for reasons other than those listed above), in an individual concentration of ≥ 0.1 % by weight for non-gaseous mixtures; or
(d) a substance for which there are Europe-wide workplace exposure limits

3. If a SVHC is found over the reporting limit, client is suggested to identify the composite component which contains the SVHC and the exact concentration of the SVHC by requesting further quantitative analysis from the laboratory.

**Test Sample:**

**Testing Group:**

| Test Result ID | Description | Test Part ID | SGS Sample ID |
|---|---|---|---|
| 001 | Black body | A20 | CAN24-0262383-0001.C020 |
| 002 | Silvery metal pin | A21 | CAN24-0262383-0001.C021 |

**Test Method:**
With reference to SGS In-House method, analysis was performed by ICP-OES, UV-VIS, GC-MS, HPLC-DAD/MS and Colorimetric Method.



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**Result of SVHC in the Candidate List**

| Batch | Substance Name | CAS No. | 001 Concentration (%) | RL (%) |
|---|---|---|---|---|
| VIII | Lead cyanamidate* | 20837-86-9 | NA^ | 0.005 |
| VIII | Lead dinitrate* | 10099-74-8 | NA^ | 0.005 |
| VIII | Lead monoxide* | 1317-36-8 | NA^ | 0.005 |
| VIII | Lead oxide sulfate* | 12036-76-9 | NA^ | 0.005 |
| VIII | Lead tetroxide (orange lead)* | 1314-41-6 | NA^ | 0.005 |
| VIII | Sulfurous acid, lead salt, dibasic* | 62229-08-7 | NA^ | 0.005 |
| VIII | Tetralead trioxide sulphate* | 12202-17-4 | NA^ | 0.005 |
| VIII | Trilead bis(carbonate)dihydroxide (basic lead carbonate)* | 1319-46-6 | NA^ | 0.005 |
| X | Lead di(acetate)* | 301-04-2 | NA^ | 0.005 |
| XIX | Lead | 7439-92-1 | 0.257 | 0.005 |
| - | Other SVHC in Candidate list | - | ND | - |

**Result of Potential SVHC**

| Batch | Substance Name | CAS No. | 001 Concentration (%) | RL (%) |
|---|---|---|---|---|
| / | All Potential SVHC | - | ND | - |

**Result of SVHC in the Candidate List**

| Batch | Substance Name | CAS No. | 002 Concentration (%) | RL (%) |
|---|---|---|---|---|
| - | All SVHC in Candidate list | - | ND | - |

**Result of Potential SVHC**

| Batch | Substance Name | CAS No. | 002 Concentration (%) | RL (%) |
|---|---|---|---|---|
| / | All Potential SVHC | - | ND | - |

**Notes:**

(1) The table above only shows detected SVHC, and SVHC that below RL are not reported. Please refer to Appendix for the full list of tested SVHC.

(2) RL = Reporting Limit (Test data will be shown if it ≥ RL. RL is not regulatory limit.)
ND = Not detected (lower than RL), ND is denoted on the SVHC substance.

(3) * The result is based on the calculation of selected element(s) under the worst-case scenario, and the evaluation of substance usage and material properties.
** The result is based on the calculation of selected marker(s) and to the worst-case scenario.
Calculated concentration of boric compounds are based on water extractive boron detected by ICP-OES.
Calculated concentration of Barium diboron tetraoxide is based on water extractive boron and barium detected by ICP-OES.
RL = 0.005% is evaluated for element (i.e. cobalt, arsenic, lead, chromium, chromium (VI), aluminum, zirconium, boron, strontium, zinc, antimony, titanium, barium and cadmium respectively), except



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molybdenum RL=0.0005%, boron RL=0.0025% (only for Lead bis(tetrafluoroborate)), fluorine RL=0.050%.

(4) § The substance is proposed for the identification as SVHC only where it contains Michler's ketone (CAS Number: 90-94-8) or Michler's base (CAS Number: 101-61-1) ≥0.1% (w/w).

(5) / = Potential SVHC

(6) NA^ = Upon further test verification on the specific detected element(s) of SVHC and also information provided from client, the possibility that the element(s) content originate from SVHC is very unlikely, even though their presence cannot be exclude entirely. It may be assumed that the detected element(s) have a non-SVHC source.

Remark: Results & photo(s) of this report refer to test report CANEC24026238325.
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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**Appendix**

**Full list of tested SVHC:**

| Batch | No. | Substance Name | CAS No. | RL (%) |
|---|---|---|---|---|
| I | 1 | 4,4'-Diaminodiphenylmethane(MDA) | 101-77-9 | 0.050 |
| I | 2 | 5-tert-butyl-2,4,6-trinitro-m-xylene (musk xylene) | 81-15-2 | 0.050 |
| I | 3 | Alkanes, C10-13, chloro (Short Chain Chlorinated Paraffins) | 85535-84-8 | 0.050 |
| I | 4 | Anthracene | 120-12-7 | 0.050 |
| I | 5 | Benzyl butyl phthalate (BBP) | 85-68-7 | 0.050 |
| I | 6 | Bis(2-ethylhexyl)phthalate (DEHP) | 117-81-7 | 0.050 |
| I | 7 | Bis(tributyltin)oxide (TBTO) | 56-35-9 | 0.050 |
| I | 8 | Cobalt dichloride* | 7646-79-9 | 0.005 |
| I | 9 | Diarsenic pentaoxide* | 1303-28-2 | 0.005 |
| I | 10 | Diarsenic trioxide* | 1327-53-3 | 0.005 |
| I | 11 | Dibutyl phthalate (DBP) | 84-74-2 | 0.050 |
| I | 12 | Hexabromocyclododecane (HBCDD) and all major diastereoisomers identified (α-HBCDD, β-HBCDD, γ-HBCDD) | - | 0.050 |
| I | 13 | Lead hydrogen arsenate* | 7784-40-9 | 0.005 |
| I | 14 | Sodium dichromate* | 10588-01-9 /7789-12-0 | 0.005 |
| I | 15 | Triethyl arsenate* | 15606-95-8 | 0.005 |
| II | 16 | 2,4-Dinitrotoluene | 121-14-2 | 0.050 |
| II | 17 | Anthracene oil** | 90640-80-5 | 0.050 |
| II | 18 | Anthracene oil, anthracene paste** | 90640-81-6 | 0.050 |
| II | 19 | Anthracene oil, anthracene paste, anthracene fraction** | 91995-15-2 | 0.050 |
| II | 20 | Anthracene oil, anthracene paste, distn. Lights** | 91995-17-4 | 0.050 |
| II | 21 | Anthracene oil, anthracene-low** | 90640-82-7 | 0.050 |
| II | 22 | Diisobutyl phthalate | 84-69-5 | 0.050 |
| II | 23 | Lead chromate* | 7758-97-6 | 0.005 |
| II | 24 | Lead chromate molybdate sulphate red (C.I. Pigment Red 104)* | 12656-85-8 | 0.005 |
| II | 25 | Lead sulfochromate yellow (C.I. Pigment Yellow 34)* | 1344-37-2 | 0.005 |
| II | 26 | Pitch, coal tar, high temp. ** | 65996-93-2 | 0.050 |
| II | 27 | Tris(2-chloroethyl)phosphate | 115-96-8 | 0.050 |
| II | 28 | Acrylamide | 79-06-1 | 0.050 |
| III | 29 | Ammonium dichromate* | 7789-09-5 | 0.005 |
| III | 30 | Boric acid* | - | 0.005 |
| III | 31 | Disodium tetraborate, anhydrous* | 12179-04-3 /1303-96-4 /1330-43-4 | 0.005 |
| III | 32 | Potassium chromate* | 7789-00-6 | 0.005 |
| III | 33 | Potassium dichromate* | 7778-50-9 | 0.005 |
| III | 34 | Sodium chromate* | 7775-11-3 | 0.005 |
| III | 35 | Tetraboron disodium heptaoxide, hydrate* | 12267-73-1 | 0.005 |



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| Batch | No. | Substance Name | CAS No. | RL (%) |
|---|---|---|---|---|
| III | 36 | Trichloroethylene | 79-01-6 | 0.050 |
| IV | 37 | 2-Ethoxyethanol | 110-80-5 | 0.050 |
| IV | 38 | 2-Methoxyethanol | 109-86-4 | 0.050 |
| IV | 39 | Chromic acid, Oligomers of chromic acid and dichromic acid, Dichromic acid* | - | 0.005 |
| IV | 40 | Chromium trioxide* | 1333-82-0 | 0.005 |
| IV | 41 | Cobalt(II) carbonate* | 513-79-1 | 0.005 |
| IV | 42 | Cobalt(II) diacetate* | 71-48-7 | 0.005 |
| IV | 43 | Cobalt(II) dinitrate* | 10141-05-6 | 0.005 |
| IV | 44 | Cobalt(II) sulphate* | 10124-43-3 | 0.005 |
| V | 45 | 1,2,3-trichloropropane | 96-18-4 | 0.050 |
| V | 46 | 1,2-Benzenedicarboxylic acid, di-C6-8-branched alkyl esters, C7-rich | 71888-89-6 | 0.050 |
| V | 47 | 1,2-Benzenedicarboxylic acid, di-C7-11-branched and linear alkyl esters | 68515-42-4 | 0.050 |
| V | 48 | 1-methyl-2-pyrrolidone | 872-50-4 | 0.050 |
| V | 49 | 2-ethoxyethyl acetate | 111-15-9 | 0.050 |
| V | 50 | Hydrazine | 302-01-2 /7803-57-8 | 0.050 |
| V | 51 | strontium chromate* | 7789-06-2 | 0.005 |
| VI | 52 | 1,2-Dichloroethane | 107-06-2 | 0.050 |
| VI | 53 | 2,2'-dichloro-4,4'-methylenedianiline | 101-14-4 | 0.050 |
| VI | 54 | 2-Methoxyaniline; o-Anisidine | 90-04-0 | 0.050 |
| VI | 55 | 4-(1,1,3,3-tetramethylbutyl)phenol | 140-66-9 | 0.050 |
| VI | 56 | Aluminosilicate Refractory Ceramic Fibres* | - | 0.005 |
| VI | 57 | Arsenic acid* | 7778-39-4 | 0.005 |
| VI | 58 | Bis(2-methoxyethyl) ether | 111-96-6 | 0.050 |
| VI | 59 | Bis(2-methoxyethyl) phthalate | 117-82-8 | 0.050 |
| VI | 60 | Calcium arsenate* | 7778-44-1 | 0.005 |
| VI | 61 | Dichromium tris(chromate)* | 24613-89-6 | 0.005 |
| VI | 62 | Formaldehyde, oligomeric reaction products with aniline | 25214-70-4 | 0.050 |
| VI | 63 | Lead diazide, Lead azide* | 13424-46-9 | 0.005 |
| VI | 64 | Lead dipicrate* | 6477-64-1 | 0.005 |
| VI | 65 | Lead styphnate* | 15245-44-0 | 0.005 |
| VI | 66 | N,N-dimethylacetamide | 127-19-5 | 0.050 |
| VI | 67 | Pentazinc chromate octahydroxide* | 49663-84-5 | 0.005 |
| VI | 68 | Phenolphthalein | 77-09-8 | 0.050 |
| VI | 69 | Potassium hydroxyoctaoxodizincatedichromate* | 11103-86-9 | 0.005 |
| VI | 70 | Trilead diarsenate* | 3687-31-8 | 0.005 |
| VI | 71 | Zirconia Aluminosilicate Refractory Ceramic Fibres* | - | 0.005 |
| VII | 72 | [4-[[4-anilino-1-naphthyl][4-(dimethylamino)phenyl]methylene]cyclohexa-2,5-dien-1-ylidene] dimethylammonium chloride (C.I. Basic Blue 26)§ | 2580-56-5 | 0.050 |



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| Batch | No. | Substance Name | CAS No. | RL (%) |
|---|---|---|---|---|
| VII | 73 | [4-[4,4'-bis(dimethylamino) benzhydrylidene]cyclohexa-2,5-dien-1-ylidene]dimethylammonium chloride (C.I. Basic Violet 3) § | 548-62-9 | 0.050 |
| VII | 74 | 1,2-bis(2-methoxyethoxy)ethane (TEGDME; triglyme) | 112-49-2 | 0.050 |
| VII | 75 | 1,2-dimethoxyethane; ethylene glycol dimethyl ether (EGDME) | 110-71-4 | 0.050 |
| VII | 76 | 4,4'-bis(dimethylamino) benzophenone (Michler's Ketone) | 90-94-8 | 0.050 |
| VII | 77 | 4,4'-bis(dimethylamino)-4''-(methylamino)trityl alcohol§ | 561-41-1 | 0.050 |
| VII | 78 | Diboron trioxide* | 1303-86-2 | 0.005 |
| VII | 79 | Formamide | 75-12-7 | 0.050 |
| VII | 80 | Lead(II) bis(methanesulfonate)* | 17570-76-2 | 0.005 |
| VII | 81 | N,N,N',N'-tetramethyl-4,4'-methylenedianiline (Michler's base) | 101-61-1 | 0.050 |
| VII | 82 | TGIC (1,3,5-tris(oxiranylmethyl)-1,3,5-triazine-2,4,6(1H,3H,5H)-trione) | 2451-62-9 | 0.050 |
| VII | 83 | α,α-Bis[4-(dimethylamino)phenyl]-4 (phenylamino)naphthalene-1-methanol (C.I. Solvent Blue 4) § | 6786-83-0 | 0.050 |
| VII | 84 | β-TGIC (1,3,5-tris[(2S and 2R)-2,3-epoxypropyl]-1,3,5-triazine-2,4,6-(1H,3H,5H)-trione) | 59653-74-6 | 0.050 |
| VIII | 85 | [Phthalato(2-)]dioxotrilead* | 69011-06-9 | 0.005 |
| VIII | 86 | 1,2-Benzenedicarboxylic acid, dipentylester, branched and linear | 84777-06-0 | 0.050 |
| VIII | 87 | 1,2-Diethoxyethane | 629-14-1 | 0.050 |
| VIII | 88 | 1-Bromopropane | 106-94-5 | 0.050 |
| VIII | 89 | 3-Ethyl-2-methyl-2-(3-methylbutyl)-1,3-oxazolidine | 143860-04-2 | 0.050 |
| VIII | 90 | 4-(1,1,3,3-tetramethylbutyl)phenol, ethoxylated | - | 0.050 |
| VIII | 91 | 4,4'-Methylenedi-o-toluidine | 838-88-0 | 0.050 |
| VIII | 92 | 4,4'-Oxydianiline and its salts | 101-80-4 | 0.050 |
| VIII | 93 | 4-Aminoazobenzene | 60-09-3 | 0.050 |
| VIII | 94 | 4-Methyl-m-phenylenediamine | 95-80-7 | 0.050 |
| VIII | 95 | 4-Nonylphenol, branched and linear | - | 0.050 |
| VIII | 96 | 6-Methoxy-m-toluidine | 120-71-8 | 0.050 |
| VIII | 97 | Acetic acid, lead salt, basic* | 51404-69-4 | 0.005 |
| VIII | 98 | Biphenyl-4-ylamine | 92-67-1 | 0.050 |
| VIII | 99 | Decabromodiphenyl ether (DecaBDE) | 1163-19-5 | 0.050 |
| VIII | 100 | Cyclohexane-1,2-dicarboxylic anhydride, cis-cyclohexane-1,2-dicarboxylic anhydride, trans-cyclohexane-1,2-dicarboxylic anhydride | - | 0.050 |
| VIII | 101 | Diazene-1,2-dicarboxamide (C,C'-azodi(formamide)) | 123-77-3 | 0.050 |



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| Batch | No. | Substance Name | CAS No. | RL (%) |
|---|---|---|---|---|
| VIII | 102 | Dibutyltin dichloride (DBTC) | 683-18-1 | 0.050 |
| VIII | 103 | Diethyl sulphate | 64-67-5 | 0.050 |
| VIII | 104 | Diisopentylphthalate | 605-50-5 | 0.050 |
| VIII | 105 | Dimethyl sulphate | 77-78-1 | 0.050 |
| VIII | 106 | Dinoseb | 88-85-7 | 0.050 |
| VIII | 107 | Dioxobis(stearato)trilead* | 12578-12-0 | 0.005 |
| VIII | 108 | Fatty acids, C16-18, lead salts* | 91031-62-8 | 0.005 |
| VIII | 109 | Furan | 110-00-9 | 0.050 |
| VIII | 110 | Henicosafluoroundecanoic acid | 2058-94-8 | 0.050 |
| VIII | 111 | Heptacosafluorotetradecanoic acid | 376-06-7 | 0.050 |
| VIII | 112 | Hexahydromethylphthalic anhydride, Hexahydro-4-methylphthalic anhydride, Hexahydro-1-methylphthalic anhydride, Hexahydro-3-methylphthalic anhydride | - | 0.050 |
| VIII | 113 | Lead bis(tetrafluoroborate)* | 13814-96-5 | 0.005 |
| VIII | 114 | Lead cyanamidate* | 20837-86-9 | 0.005 |
| VIII | 115 | Lead dinitrate* | 10099-74-8 | 0.005 |
| VIII | 116 | Lead monoxide* | 1317-36-8 | 0.005 |
| VIII | 117 | Lead oxide sulfate* | 12036-76-9 | 0.005 |
| VIII | 118 | Lead tetroxide (orange lead)* | 1314-41-6 | 0.005 |
| VIII | 119 | Lead titanium trioxide* | 12060-00-3 | 0.005 |
| VIII | 120 | Lead titanium zirconium oxide* | 12626-81-2 | 0.005 |
| VIII | 121 | Methoxyacetic acid | 625-45-6 | 0.050 |
| VIII | 122 | Methyloxirane (Propylene oxide) | 75-56-9 | 0.050 |
| VIII | 123 | N,N-Dimethylformamide | 68-12-2 | 0.050 |
| VIII | 124 | N-Methylacetamide | 79-16-3 | 0.050 |
| VIII | 125 | N-Pentyl-isopentylphthalate | 776297-69-9 | 0.050 |
| VIII | 126 | o-Aminoazotoluene | 97-56-3 | 0.050 |
| VIII | 127 | o-Toluidine | 95-53-4 | 0.050 |
| VIII | 128 | Pentacosafluorotridecanoic acid | 72629-94-8 | 0.050 |
| VIII | 129 | Pentalead tetraoxide sulphate* | 12065-90-6 | 0.005 |
| VIII | 130 | Pyrochlore, antimony lead yellow* | 8012-00-8 | 0.005 |
| VIII | 131 | Silicic acid, barium salt, lead-doped* | 68784-75-8 | 0.005 |
| VIII | 132 | Silicic acid, lead salt* | 11120-22-2 | 0.005 |
| VIII | 133 | Sulfurous acid, lead salt, dibasic* | 62229-08-7 | 0.005 |
| VIII | 134 | Tetraethyllead* | 78-00-2 | 0.005 |
| VIII | 135 | Tetralead trioxide sulphate* | 12202-17-4 | 0.005 |
| VIII | 136 | Tricosafluorododecanoic acid | 307-55-1 | 0.050 |
| VIII | 137 | Trilead bis(carbonate)dihydroxide (basic lead carbonate)* | 1319-46-6 | 0.005 |
| VIII | 138 | Trilead dioxide phosphonate* | 12141-20-7 | 0.005 |
| IX | 139 | 4-Nonylphenol, branched and linear, ethoxylated | - | 0.050 |
| IX | 140 | Ammonium pentadecafluorooctanoate (APFO)** | 3825-26-1 | 0.050 |
| IX | 141 | Cadmium oxide* | 1306-19-0 | 0.005 |
| IX | 142 | Cadmium | 7440-43-9 | 0.005 |



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| Batch | No. | Substance Name | CAS No. | RL (%) |
|---|---|---|---|---|
| IX | 143 | Dipentyl phthalate (DPP) | 131-18-0 | 0.050 |
| IX | 144 | Pentadecafluorooctanoic acid (PFOA) | 335-67-1 | 0.050 |
| X | 145 | Cadmium sulphide* | 1306-23-6 | 0.005 |
| X | 146 | Dihexyl phthalate | 84-75-3 | 0.050 |
| X | 147 | Disodium 3,3'-[[1,1'-biphenyl]-4,4'-diylbis(azo)]bis(4-aminonaphthalene-1-sulphonate) (C.I. Direct Red 28) | 573-58-0 | 0.050 |
| X | 148 | Disodium 4-amino-3-[[4'-[(2,4-diaminophenyl)azo][1,1'-biphenyl]-4-yl]azo] -5-hydroxy-6-(phenylazo)naphthalene-2,7-disulphonate (C.I. Direct Black 38) | 1937-37-7 | 0.050 |
| X | 149 | Imidazolidine-2-thione; (2-imidazoline-2-thiol) | 96-45-7 | 0.050 |
| X | 150 | Lead di(acetate)* | 301-04-2 | 0.005 |
| X | 151 | Trixylyl phosphate | 25155-23-1 | 0.050 |
| XI | 152 | 1,2-Benzenedicarboxylic acid, dihexyl ester, branched and linear | 68515-50-4 | 0.050 |
| XI | 153 | Cadmium chloride* | 10108-64-2 | 0.005 |
| XI | 154 | Sodium perborate; perboric acid, sodium salt* | - | 0.005 |
| XI | 155 | Sodium peroxometaborate* | 7632-04-4 | 0.005 |
| XII | 156 | 2-(2H-benzotriazol-2-yl)-4,6-ditertpentylphenol (UV-328) | 25973-55-1 | 0.050 |
| XII | 157 | 2-benzotriazol-2-yl-4,6-di-tert-butylphenol (UV-320) | 3846-71-7 | 0.050 |
| XII | 158 | 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (DOTE) | 15571-58-1 | 0.050 |
| XII | 159 | Cadmium fluoride* | 7790-79-6 | 0.005 |
| XII | 160 | Cadmium sulphate* | 10124-36-4 /31119-53-6 | 0.005 |
| XII | 161 | Reaction mass of 2-ethylhexyl 10-ethyl-4,4-dioctyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate & 2-ethylhexyl 10-ethyl-4-[[2-[(2-ethylhexyl)oxy]-2-oxoethyl]thio]-4-octyl-7-oxo-8-oxa-3,5-dithia-4-stannatetradecanoate (reaction mass of DOTE & MOTE) | - | 0.050 |
| XIII | 162 | 1,2-benzenedicarboxylic acid, di-C6-10-alkyl esters; 1,2-benzenedicarboxylic acid, mixed decyl and hexyl and octyl diesters with ≥ 0.3% of dihexyl phthalate | - | 0.050 |
| XIII | 163 | 5-sec-butyl-2-(2,4-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [1], 5-sec-butyl-2-(4,6-dimethylcyclohex-3-en-1-yl)-5-methyl-1,3-dioxane [2] [covering any of the individual isomers of [1] and [2] or any combination thereof] | - | 0.050 |
| XIV | 164 | 1,3-propanesultone | 1120-71-4 | 0.050 |
| XIV | 165 | 2,4-di-tert-butyl-6-(5-chlorobenzotriazol-2-yl) phenol (UV-327) | 3864-99-1 | 0.050 |



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| Batch | No. | Substance Name | CAS No. | RL (%) |
|---|---|---|---|---|
| XIV | 166 | 2-(2H-benzotriazol-2-yl)-4-(tert-butyl)-6-(sec-butyl) phenol (UV-350) | 36437-37-3 | 0.050 |
| XIV | 167 | Nitrobenzene | 98-95-3 | 0.050 |
| XIV | 168 | Perfluorononan-1-oic-acid and its sodium and ammonium salts | - | 0.050 |
| XV | 169 | Benzo[def]chrysene (Benzo[a]pyrene) | 50-32-8 | 0.050 |
| XVI | 170 | 4,4'-isopropylidenediphenol (bisphenol A) | 80-05-7 | 0.050 |
| XVI | 171 | 4-Heptylphenol, branched and linear | - | 0.050 |
| XVI | 172 | Nonadecafluorodecanoic acid (PFDA) and its sodium and ammonium salts | - | 0.050 |
| XVI | 173 | p-(1,1-dimethylpropyl)phenol | 80-46-6 | 0.050 |
| XVII | 174 | Perfluorohexane-1-sulphonic acid and its salts | - | 0.050 |
| XVIII | 175 | 1,6,7,8,9,14,15,16,17,17,18,18-Dodecachloropentacyclo[12.2.1.16,9.02,13.05,10]octadeca-7,15-diene ("Dechlorane Plus"™) [covering any of its individual anti- and syn-isomers or any combination thereof] | - | 0.050 |
| XVIII | 176 | Benz[a]anthracene | 56-55-3 | 0.050 |
| XVIII | 177 | Cadmium nitrate* | 10325-94-7 | 0.005 |
| XVIII | 178 | Cadmium carbonate* | 513-78-0 | 0.005 |
| XVIII | 179 | Cadmium hydroxide* | 21041-95-2 | 0.005 |
| XVIII | 180 | Chrysene | 218-01-9 | 0.050 |
| XVIII | 181 | Reaction products of 1,3,4-thiadiazolidine-2,5-dithione, formaldehyde and 4-heptylphenol, branched and linear (RP-HP) [with ≥0.1% w/w 4-heptylphenol, branched and linear] | - | 0.050 |
| XIX | 182 | Benzene-1,2,4-tricarboxylic acid 1,2 anhydride (trimellitic anhydride) (TMA) | 552-30-7 | 0.050 |
| XIX | 183 | Benzo[ghi]perylene | 191-24-2 | 0.050 |
| XIX | 184 | Decamethylcyclopentasiloxane (D5) | 541-02-6 | 0.050 |
| XIX | 185 | Dicyclohexyl phthalate (DCHP) | 84-61-7 | 0.050 |
| XIX | 186 | Disodium octaborate* | 12008-41-2 | 0.005 |
| XIX | 187 | Dodecamethylcyclohexasiloxane (D6) | 540-97-6 | 0.050 |
| XIX | 188 | Ethylenediamine (EDA) | 107-15-3 | 0.050 |
| XIX | 189 | Lead | 7439-92-1 | 0.005 |
| XIX | 190 | Octamethylcyclotetrasiloxane (D4) | 556-67-2 | 0.050 |
| XIX | 191 | Terphenyl, hydrogenated | 61788-32-7 | 0.050 |
| XX | 192 | 1,7,7-trimethyl-3-(phenylmethylene)bicyclo[2.2.1]heptan-2-one (3-benzylidene camphor) | 15087-24-8 | 0.050 |
| XX | 193 | 2,2-bis(4'-hydroxyphenyl)-4-methylpentane | 6807-17-6 | 0.050 |
| XX | 194 | Benzo[k]fluoranthene | 207-08-9 | 0.050 |
| XX | 195 | Fluoranthene | 206-44-0 | 0.050 |
| XX | 196 | Phenanthrene | 85-01-8 | 0.050 |
| XX | 197 | Pyrene | 129-00-0 | 0.050 |
| XXI | 198 | 2,3,3,3-tetrafluoro-2-(heptafluoropropoxy)propionic acid, its salts | - | 0.050 |



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|---|---|---|---|---|
| | | and its acyl halides (covering any of their individual isomers and combinations thereof) | | |
| XXI | 199 | 2-methoxyethyl acetate | 110-49-6 | 0.050 |
| XXI | 200 | 4-tert-butylphenol (PTBP) | 98-54-4 | 0.050 |
| XXI | 201 | Tris(4-nonylphenyl, branched and linear) phosphite (TNPP) with ≥ 0.1% w/w of 4-nonylphenol, branched and linear (4-NP) | - | 0.050 |
| XXII | 202 | 2-benzyl-2-dimethylamino-4'-morpholinobutyrophenone | 119313-12-1 | 0.050 |
| XXII | 203 | 2-methyl-1-(4-methylthiophenyl)-2-morpholinopropan-1-one | 71868-10-5 | 0.050 |
| XXII | 204 | Diisohexyl phthalate | 71850-09-4 | 0.050 |
| XXII | 205 | Perfluorobutane sulfonic acid (PFBS) and its salts | - | 0.050 |
| XXIII | 206 | 1-vinylimidazole | 1072-63-5 | 0.050 |
| XXIII | 207 | 2-methylimidazole | 693-98-1 | 0.050 |
| XXIII | 208 | Butyl 4-hydroxybenzoate | 94-26-8 | 0.050 |
| XXIII | 209 | Dibutylbis(pentane-2,4-dionato-O,O')tin** | 22673-19-4 | 0.050 |
| XXIV | 210 | bis(2-(2-methoxyethoxy)ethyl) ether | 143-24-8 | 0.050 |
| XXIV | 211 | Dioctyltin dilaurate, stannane, dioctyl-, bis(coco acyloxy) derivs., and any other stannane, dioctyl-, bis(fatty acyloxy) derivs. wherein C12 is the predominant carbon number of the fatty acyloxy moiety** | - | 0.050 |
| XXV | 212 | 1,4-Dioxane | 123-91-1 | 0.050 |
| XXV | 213 | 2,2-bis(bromomethyl)propane1,3-diol (BMP); 2,2-dimethylpropan-1-ol, tribromo derivative/3-bromo-2,2-bis(bromomethyl)-1-propanol (TBNPA); 2,3-dibromo-1-propanol (2,3-DBPA) | - | 0.050 |
| XXV | 214 | 2-(4-tert-butylbenzyl)propionaldehyde and its individual stereoisomers | - | 0.050 |
| XXV | 215 | 4,4'-(1-methylpropylidene)bisphenol; (bisphenol B) | 77-40-7 | 0.050 |
| XXV | 216 | Glutaral | 111-30-8 | 0.050 |
| XXV | 217 | Medium-chain chlorinated paraffins (MCCP) [UVCB substances consisting of more than or equal to 80% linear chloroalkanes with carbon chain lengths within the range from C14 to C17] | - | 0.050 |
| XXV | 218 | Orthoboric acid, sodium salt* | 13840-56-7 | 0.005 |
| XXV | 219 | Phenol, alkylation products (mainly in para position) with C12-rich branched or linear alkyl chains from oligomerisation, covering any individual isomers and/ or combinations thereof (PDDP) | - | 0.050 |
| XXVI | 220 | (±)-1,7,7-trimethyl-3-[(4-methylphenyl)methylene]bicyclo[2.2.1]heptan- | - | 0.050 |



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|---|---|---|---|---|
| | | 2-one covering any of the individual isomers and/or combinations thereof (4-MBC) | | |
| XXVI | 221 | 6,6'-di-tert-butyl-2,2'-methylenedi-p-cresol (DBMC) | 119-47-1 | 0.050 |
| XXVI | 222 | S-(tricyclo[5.2.1.0'2,6]deca-3-en-8(or 9)-yl) O-(isopropyl or isobutyl or 2-ethylhexyl) O-(isopropyl or isobutyl or 2-ethylhexyl) phosphorodithioate | 255881-94-8 | 0.050 |
| XXVI | 223 | Tris(2-methoxyethoxy)vinylsilane | 1067-53-4 | 0.050 |
| XXVII | 224 | N-(hydroxymethyl)acrylamide | 924-42-5 | 0.050 |
| XXVIII | 225 | 1,1'-[ethane-1,2-diylbisoxy]bis[2,4,6-tribromobenzene] | 37853-59-1 | 0.050 |
| XXVIII | 226 | 2,2',6,6'-tetrabromo-4,4'-isopropylidenediphenol | 79-94-7 | 0.050 |
| XXVIII | 227 | 4,4'-sulphonyldiphenol | 80-09-1 | 0.050 |
| XXVIII | 228 | Barium diboron tetraoxide* | 13701-59-2 | 0.005 |
| XXVIII | 229 | Bis(2-ethylhexyl) tetrabromophthalate covering any of the individual isomers and/or combinations thereof | - | 0.050 |
| XXVIII | 230 | Isobutyl 4-hydroxybenzoate | 4247-02-3 | 0.050 |
| XXVIII | 231 | Melamine | 108-78-1 | 0.050 |
| XXVIII | 232 | Perfluoroheptanoic acid and its salts | - | 0.050 |
| XXVIII | 233 | reaction mass of 2,2,3,3,5,5,6,6-octafluoro-4-(1,1,1,2,3,3,3-heptafluoropropan-2-yl)morpholine and 2,2,3,3,5,5,6,6-octafluoro-4-(heptafluoropropyl)morpholine* | - | 0.050 |
| XXIX | 234 | Bis(4-chlorophenyl) sulphone | 80-07-9 | 0.050 |
| XXIX | 235 | Diphenyl(2,4,6-trimethylbenzoyl)phosphine oxide | 75980-60-8 | 0.050 |
| XXX | 236 | 2,4,6-tri-tert-butylphenol | 732-26-3 | 0.050 |
| XXX | 237 | 2-(2H-benzotriazol-2-yl)-4-(1,1,3,3-tetramethylbutyl)phenol (UV-329) | 3147-75-9 | 0.050 |
| XXX | 238 | 2-(dimethylamino)-2-[(4-methylphenyl)methyl]-1-[4-(morpholin-4-yl)phenyl]butan-1-one | 119344-86-4 | 0.050 |
| XXX | 239 | Bumetrizole (UV-326) | 3896-11-5 | 0.050 |
| XXX | 240 | Oligomerisation and alkylation reaction products of 2-phenylpropene and phenol | - | 0.050 |
| XXXI | 241 | Bis(α,α-dimethylbenzyl) peroxide | 80-43-3 | 0.050 |
| XXXI | 242 | Triphenyl phosphate | 115-86-6 | 0.050 |
| / | 243 | 6-[(C10-C13)-alkyl-(branched, unsaturated)-2,5-dioxopyrrolidin-1-yl]hexanoic acid | 2156592-54-8 | 0.050 |
| / | 244 | O,O,O-triphenyl phosphorothioate | 597-82-0 | 0.050 |
| / | 245 | Octamethyltrisiloxane | 107-51-7 | 0.050 |
| / | 246 | Perfluamine | 338-83-0 | 0.050 |
| / | 247 | Reaction mass of: triphenylthiophosphate and tertiary butylated phenyl derivatives | 192268-65-8 | 0.050 |
| / | 248 | Tris(4-nonylphenyl, branched) phosphite | - | 0.050 |
| / | 249 | Resorcinol | 108-46-3 | 0.050 |



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| Batch | No. | Substance Name | CAS No. | RL (%) |
|---|---|---|---|---|
| / | 250 | 1,1,1,3,5,5,5-heptamethyl-3-[(trimethylsilyl)oxy]trisiloxane | 17928-28-8 | 0.050 |
| / | 251 | 1,1,1,3,5,5,5-heptamethyltrisiloxane | 1873-88-7 | 0.050 |
| / | 252 | Decamethyltetrasiloxane | 141-62-8 | 0.050 |
| / | 253 | Dodecamethylpentasiloxane | 141-63-9 | 0.050 |
| / | 254 | Hexamethyldisiloxane | 107-46-0 | 0.050 |
| / | 255 | Barium chromate* | 10294-40-3 | 0.005 |



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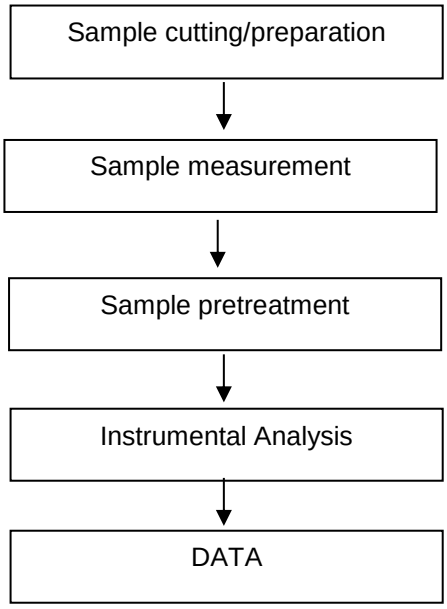
## ATTACHMENTS

### Testing Flow Chart



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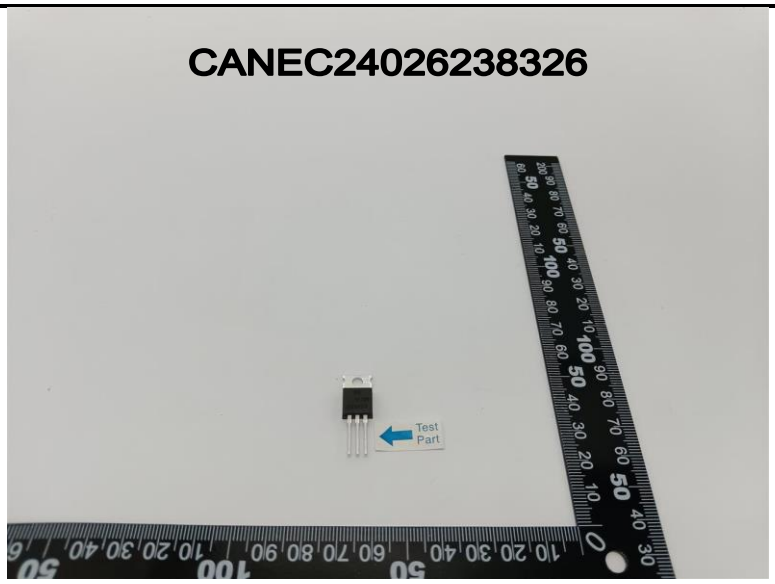
**Sample photos:**


CAN24-0262383-0001.C020




CAN24-0262383-0001.C021

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*** End of Report ***



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