

NEOFLAM CO.,LTD.

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Wonju-si, Gangwon-do
Korea



The following sample(s) was/were submitted and identified by/on behalf of the client as:-

SGS File No. : AYAA18-01966
Product Name : Neoflam Ceramic Coating
Item No./Part No. : N/A
Received Date : 2018. 01. 05
Test Period : 2018. 01. 05 to 2018. 01. 12
Test Results : For further details, please refer to following page(s)

SGS Korea Co., Ltd.**Jeff Jang / Chemical Lab Mgr**

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Test Report No. F690101/LF-CTSAYAA18-01966

Issued Date : 2018. 01. 12

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Sample No. : AYAA18-01966.001
Sample Description : Neoflam Ceramic Coating
Item No./Part No. : N/A
Materials : N/A

Perfluorinated Compounds (PFCs)

| Test Items | Unit | Test Method | MDL | Results |
|--|-------|------------------------------|-----|---------|
| Perfluorobutane Acid (PFBA) | mg/kg | CEN/TS 15968 : 2010, HPLC/MS | 1 | N.D. |
| Perfluorodecane Acid (PFDA) | mg/kg | CEN/TS 15968 : 2010, HPLC/MS | 1 | N.D. |
| Perfluoropentane Acid (PFPA) | mg/kg | CEN/TS 15968 : 2010, HPLC/MS | 1 | N.D. |
| Perfluorobutane Sulfonate (PFBS) | mg/kg | CEN/TS 15968 : 2010, HPLC/MS | 1 | N.D. |
| Perfluorohexane Acid(PFHxA) | mg/kg | CEN/TS 15968 : 2010, HPLC/MS | 1 | N.D. |
| 7H-Dodecanefluoroheptane Acid (HPFHpA) | mg/kg | CEN/TS 15968 : 2010, HPLC/MS | 1 | N.D. |
| Perfluoroheptane Acid (PFHpA) | mg/kg | CEN/TS 15968 : 2010, HPLC/MS | 1 | N.D. |
| 2H,2H-Perfluorodecane Acid (H2PFDA) | mg/kg | CEN/TS 15968 : 2010, HPLC/MS | 1 | N.D. |
| Perfluorohexane Sulfonate (PFHxS) | mg/kg | CEN/TS 15968 : 2010, HPLC/MS | 1 | N.D. |
| Perfluorootanoic acid (PFOA) | mg/kg | CEN/TS 15968 : 2010, HPLC/MS | 1 | N.D. |
| Perfluorooctanesulphonic acid 1H,1H,2H,2H (H4PFOS; 6:2) | mg/kg | CEN/TS 15968 : 2010, HPLC/MS | 1 | N.D. |
| Perfluoroheptane Sulfonate (PFHpS) | mg/kg | CEN/TS 15968 : 2010, HPLC/MS | 1 | N.D. |
| Perfluorononane Acid (PFNA) | mg/kg | CEN/TS 15968 : 2010, HPLC/MS | 1 | N.D. |
| Perfluoro-3,7-dimethyloctanoic Acid (PF-3,7-DMOA) | mg/kg | CEN/TS 15968 : 2010, HPLC/MS | 1 | N.D. |
| 2H,2H,3H,3H-Perfluoroundecanoic Acid (H4PFUnA) | mg/kg | CEN/TS 15968 : 2010, HPLC/MS | 1 | N.D. |
| Perfluorooctane Sulfonamide (PFOSA) | mg/kg | CEN/TS 15968 : 2010, HPLC/MS | 1 | N.D. |
| Perfluorootanoic sulfonate (PFOS) * | mg/kg | CEN/TS 15968 : 2010, HPLC/MS | 1 | N.D. |
| N-methylperfluoro-1-octanesulfonamide (MeFOSA) | mg/kg | CEN/TS 15968 : 2010, HPLC/MS | 1 | N.D. |
| N-ethylperfluoro-1-octanesulfonamide (EtFOSA) | mg/kg | CEN/TS 15968 : 2010, HPLC/MS | 1 | N.D. |
| Perfluorodecane Sulfonate (PFDS) | mg/kg | CEN/TS 15968 : 2010, HPLC/MS | 1 | N.D. |
| Perfluoroundecanoic Acid (PFUnA) | mg/kg | CEN/TS 15968 : 2010, HPLC/MS | 1 | N.D. |
| Perfluorododecanoic Acid (PFDoA) | mg/kg | CEN/TS 15968 : 2010, HPLC/MS | 1 | N.D. |
| 2-(N-methylperfluoro-1-octanesulfonamido) - ethanol (MeFOSE) | mg/kg | CEN/TS 15968 : 2010, HPLC/MS | 1 | N.D. |

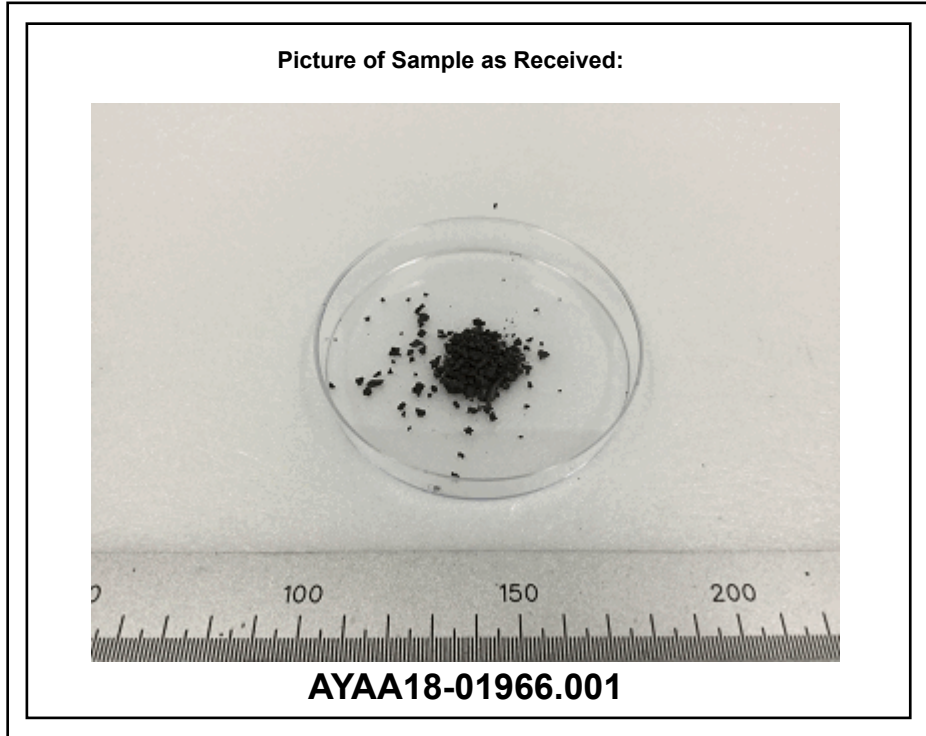
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Sample No. : AYAA18-01966.001
Sample Description : Neoflam Ceramic Coating
Item No./Part No. : N/A
Materials : N/A

Perfluorinated Compounds (PFCs)

| Test Items | Unit | Test Method | MDL | Results |
|---|-------|------------------------------|-----|---------|
| 2-(N-ethylperfluoro-1-octanesulfonamido)-ethanol (EtFOSE) | mg/kg | CEN/TS 15968 : 2010, HPLC/MS | 1 | N.D. |
| Perfluorotridecanoic Acid (PFTra) | mg/kg | CEN/TS 15968 : 2010, HPLC/MS | 1 | N.D. |
| Perfluorotetradecanoic Acid (PFTeA) | mg/kg | CEN/TS 15968 : 2010, HPLC/MS | 1 | N.D. |
| Ammonium pentadecafluorooctanoate (APFO)# | mg/kg | CEN/TS 15968 : 2010, HPLC/MS | 1 | N.D. |
| 1H,1H,2H,2H-Perfluoro-1-hexanol (4:2 FTOH) | mg/kg | CEN/TS 15968 : 2010, GC/MS | 1 | N.D. |
| 1H,1H,2H,2H-Perfluoro-1-octanol (6:2 FTOH) | mg/kg | CEN/TS 15968 : 2010, GC/MS | 1 | N.D. |
| 1H,1H,2H,2H-Perfluorooctylacrylate (6:2 FTA) | mg/kg | CEN/TS 15968 : 2010, GC/MS | 1 | N.D. |
| 1H,1H,2H,2H-Perfluoro-1-decanol (8:2 FTOH) | mg/kg | CEN/TS 15968 : 2010, GC/MS | 1 | N.D. |
| 1H,1H,2H,2H-Perfluorodecylacrylate (8:2 FTA) | mg/kg | CEN/TS 15968 : 2010, GC/MS | 1 | N.D. |
| 1H,1H,2H,2H-Perfluoro-1-dodecanol (10:2 FTOH) | mg/kg | CEN/TS 15968 : 2010, GC/MS | 1 | N.D. |
| 1H,1H,2H,2H-Perfluorododecylacrylate (10:2 FTA) | mg/kg | CEN/TS 15968 : 2010, GC/MS | 1 | N.D. |

- NOTE:
- (1) N.D. = Not detected.(<MDL)
 - (2) mg/kg = ppm
 - (3) MDL = Method Detection Limit
 - (4) - = No regulation
 - (5) ** = Qualitative analysis (No Unit)
 - (6) Negative = Undetectable / Positive = Detectable
 - (7) *: PFOS was reported as the sum of the corresponding concentration of PFOS derivatives scaling on a molar basis.
 - (8) #: APFO was reported as the corresponding concentration of PFOA scaling on a molar basis.



*** End of Report ***

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