

Test Report

No. TSNEC2100372601

Date: 15 Mar 2021

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XINGTAI IRON AND STEEL CORP., LTD
262 GANGTIE ROAD, XINGTAI, HEBEI, CHINA

The following sample(s) was/were submitted and identified on behalf of the clients as : HOT ROLLED STEEL WIRE RODS

SGS Job No. : TP21-001206 - TJ
Main Substance : Fe
Model No. : SWRCH18A
Client Ref. Info. : Other Model No.:SEE ATTACHMENT:
Date of Sample Received : 10 Mar 2021
Testing Period : 10 Mar 2021 - 15 Mar 2021
Test Requested : Selected test(s) as requested by client.
Test Method : Please refer to next page(s).
Test Results : Please refer to next page(s).
Conclusion : Based on the performed tests on submitted sample(s), the results of Lead, Mercury, Cadmium, Hexavalent chromium, Polybrominated biphenyls (PBBs), Polybrominated diphenyl ethers (PBDEs) and Phthalates such as Bis(2-ethylhexyl) phthalate (DEHP) , Butyl benzyl phthalate (BBP), Dibutyl phthalate (DBP) , and Diisobutyl phthalate (DIBP) comply with the limits as set by RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU.

Signed for and on behalf of
SGS-CSTC Standards Technical Services (Tianjin) Co., Ltd.

Reabeca Zhou

Reabeca Zhou
Approved Signatory

scan to see the report



TSNEC2100372601



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Test Results :

Test Part Description :

Specimen No.	SGS Sample ID	Description
SN1	TSN21-003726.001	grey metal bar

Remarks :

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

RoHS Directive (EU) 2015/863 amending Annex II to Directive 2011/65/EU

Test Method : With reference to IEC 62321-5:2013, IEC 62321-4:2013+AMD1:2017, IEC 62321-7-1:2015, IEC 62321-6:2015 and IEC62321-8:2017, analyzed by ICP-OES, UV-Vis and GC-MS.

Test Item(s)	Limit	Unit	MDL	001
Cadmium (Cd)	100	mg/kg	2	ND
Lead (Pb)	1000	mg/kg	2	ND
Mercury (Hg)	1000	mg/kg	2	ND
Hexavalent Chromium (Cr(VI))▼	-	µg/cm ²	0.10	ND
Sum of PBBs	1000	mg/kg	-	ND
Monobromobiphenyl	-	mg/kg	5	ND
Dibromobiphenyl	-	mg/kg	5	ND
Tribromobiphenyl	-	mg/kg	5	ND
Tetrabromobiphenyl	-	mg/kg	5	ND
Pentabromobiphenyl	-	mg/kg	5	ND
Hexabromobiphenyl	-	mg/kg	5	ND
Heptabromobiphenyl	-	mg/kg	5	ND
Octabromobiphenyl	-	mg/kg	5	ND
Nonabromobiphenyl	-	mg/kg	5	ND
Decabromobiphenyl	-	mg/kg	5	ND
Sum of PBDEs	1000	mg/kg	-	ND
Monobromodiphenyl ether	-	mg/kg	5	ND
Dibromodiphenyl ether	-	mg/kg	5	ND
Tribromodiphenyl ether	-	mg/kg	5	ND
Tetrabromodiphenyl ether	-	mg/kg	5	ND



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Test Item(s)	Limit	Unit	MDL	001
Pentabromodiphenyl ether	-	mg/kg	5	ND
Hexabromodiphenyl ether	-	mg/kg	5	ND
Heptabromodiphenyl ether	-	mg/kg	5	ND
Octabromodiphenyl ether	-	mg/kg	5	ND
Nonabromodiphenyl ether	-	mg/kg	5	ND
Decabromodiphenyl ether	-	mg/kg	5	ND
Dibutyl phthalate (DBP)	1000	mg/kg	50	ND
Butyl benzyl phthalate (BBP)	1000	mg/kg	50	ND
Bis (2-ethylhexyl) phthalate (DEHP)	1000	mg/kg	50	ND
Diisobutyl Phthalates (DIBP)	1000	mg/kg	50	ND

Notes :

(1) The maximum permissible limit is quoted from RoHS Directive (EU) 2015/863.

IEC 62321 series is equivalent to EN 62321 series

https://www.cenelec.eu/dyn/www/f?p=104:30:1742232870351101:::FSP_ORG_ID,FSP_LANG_ID:1258637,25

(2) ▼= a. The sample is positive for CrVI if the CrVI concentration is greater than 0.13 µg/cm². The sample coating is considered to contain CrVI

b. The sample is negative for CrVI if CrVI is ND (concentration less than 0.10 µg/cm²). The coating is considered a non-CrVI based coating

c. The result between 0.10 µg/cm² and 0.13 µg/cm² is considered to be inconclusive - unavoidable coating variations may influence the determination

Information on storage conditions and production date of the tested sample is unavailable and thus Cr(VI) results represent status of the sample at the time of testing.



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ATTACHMENT:

OTHER MODEL NO.:

ATTACHMENT:

OTHER MODEL NO.:

(XG)SWRCH6-22A

SWRCH6AB-Ti

SWRCH22A -Ti

GSWRCH10A/12A/22A-1

QSWRCH10A-C

GSWRCH20K/25K/35K/40K/45K

XGSWRCH45KB

GSWRCH35KM

SWRCH40K-1(QSWRCH40K-C)

10B21-38

10B21Cr-33Cr

SAE10B21

XG10B21-38

XG15B25

Q10B21-C

Q15B25M-MT

QSAE10B35-B

GML20Cr-B

(XG)ML40Cr

QML40Cr-B

SCM435-M

QSCM435-MT

ML42CrMo(A)

XGS15C-45C

S45CB

XGS45CB

QS35C-C

HD15

GML08AI-B

SAE1008-1018

GSAE1018

(XG)35ACR

D108BT

1215

30CrMnTi

M10

CH1T

XGYT0

XG295NH

50BV30

16MnCr5

40CrMoV

(XG)SWRCH6AB-22AB

SWRCH18AB-THA

GSWRCH6A-A(A1)

GSWRCH10A/15A/18A/22A-B

QSWRCH18AB-B

QSWRCH20K/25K/35K/40K/45K

XGSWRCH45KCr

GSWRCH35K-B

QSWRCH45K-B

10B33-FY

15B25

SWRCH10B21

XG10B33M

G10B21

Q10B21-DW(10B21)

Q15B25M

(XG)ML20Cr

QML20Cr-B

GML40Cr

QML40CrH-C

GSCM420/435/440-C

15-35CrMo

GML42CrMo

GS35C-1

S45CMOD

GS25C/35C/45C-A

ML08AI

XGML08AI

(XG)ML20MnTiB

SAE1006B-1018B

QSAE1018-B

WRCH7A(Q40ACR-C)

C4/8/10C

1215MS-1

(G/Q)ML45Mn2

LY1

CH1A

XGYT1

G295NH

SAE6150

20MnB4

40CrMoV4-6

SWRCH6ATi/8ATi/18ATi

SWRCH22A + Ti

GSWRCH10A

QSWRCH8A/10A/12A/15A/18A/22A-B

(XG)SWRCH10-45K

QSWRCH20K/25K/35K/40K/45K-MT

GSWRCH35K-1

QSWRCH35K-B

QSWRCH45K-C

10B33-FLT

51B20

SAE10B35

XG15B21

G10B21-C

Q10B23M-C

Q15B25-B

GML20Cr

QML20Cr-DF

GML40Cr-A/B

SCM415/420/435/440

QSCM435/440-C

ML20CrMo

S15C-45C

GS45C-1

XGS45C-JC

GS25C/35C/45C-B

ML15AI

ML35

G/QML20MnTiB-B

SAE1006/1008/1010/1018-Ti

QSAE8640-B

D106BT

QC15C-B

20CrMnTi

M8

LY

DT4

XGM6-1/2/PB

XG835NH

B7

30MnVS6

SNB16



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B16
MnB120H
Cq15
Q15MnVB-A
SCr440
FT9
GCr15-A
GCr15-L
GCr15-LX1
XGLX82A
XGLX72A-1
Q55SiCrA-1(54SiCr6)
SWRS82B
Q215
20CrMnTi
FT8-1

C15E2CM
MnB123H
Q17Cr3-B
35VB
GSwRH67B
Q85Mn
GCr15-DH
GCr15-ZWZ
QGCr15
XGLX82A-P
XGLX72B
60Si2MnA
GSwRH82B-1
LL15
30CrMnTi
LD22

G33B2-B
QSt32-3
Q37MnB5
SCr420B
FT8
GCr15
GCr15-Y
GCr15-LX
(XG)SwRH72A
XGLB72/75/82/85A(B)
55SiCrA(-1)
60Si2CrA
HG18
S20A
25MnV
QS20C-B



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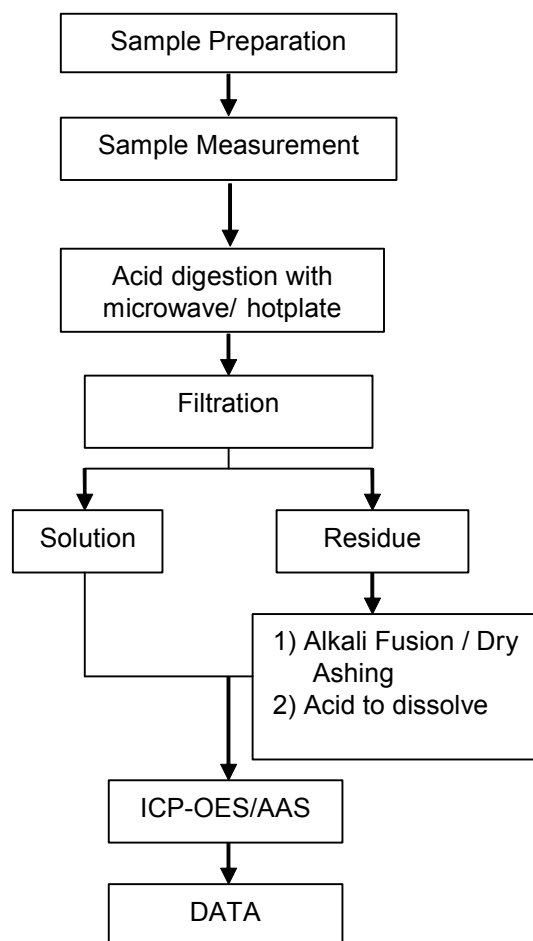
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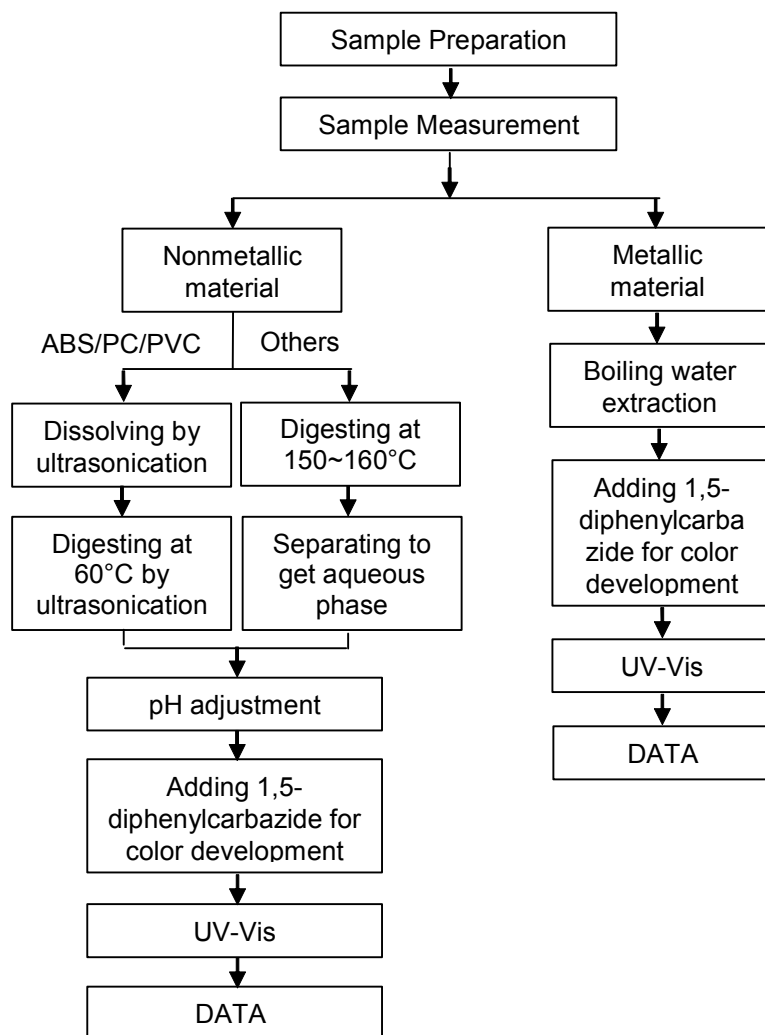
Elements (IEC62321) Testing Flow Chart

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



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Hexavalent Chromium (Cr(VI)) Testing Flow Chart



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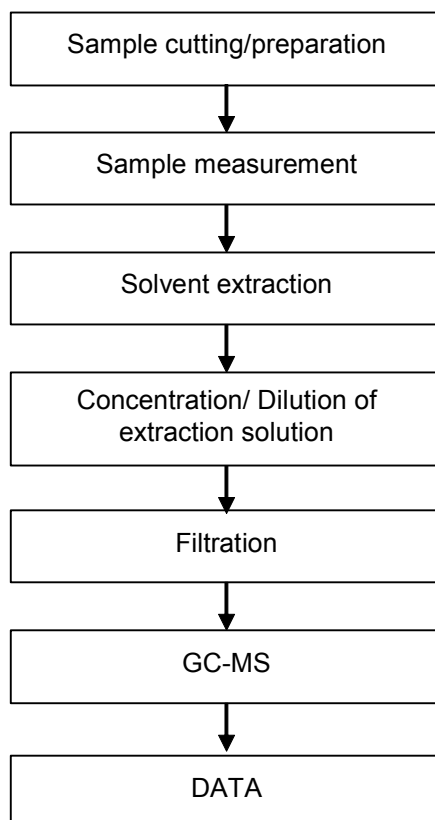
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Flame Retardants Testing Flow Chart



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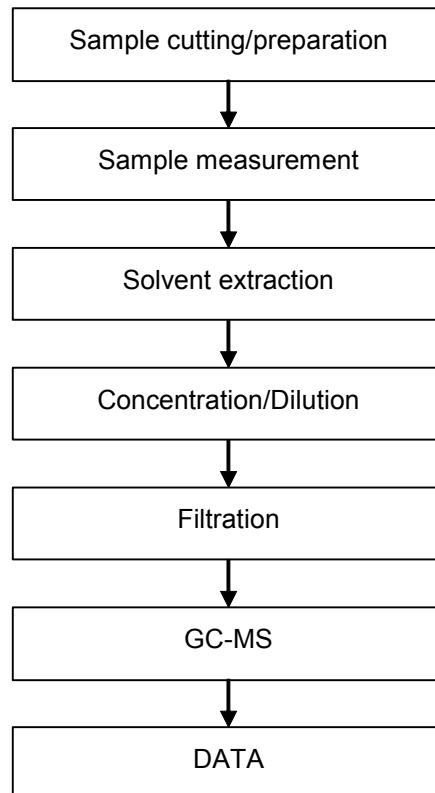
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Phthalates Testing Flow Chart



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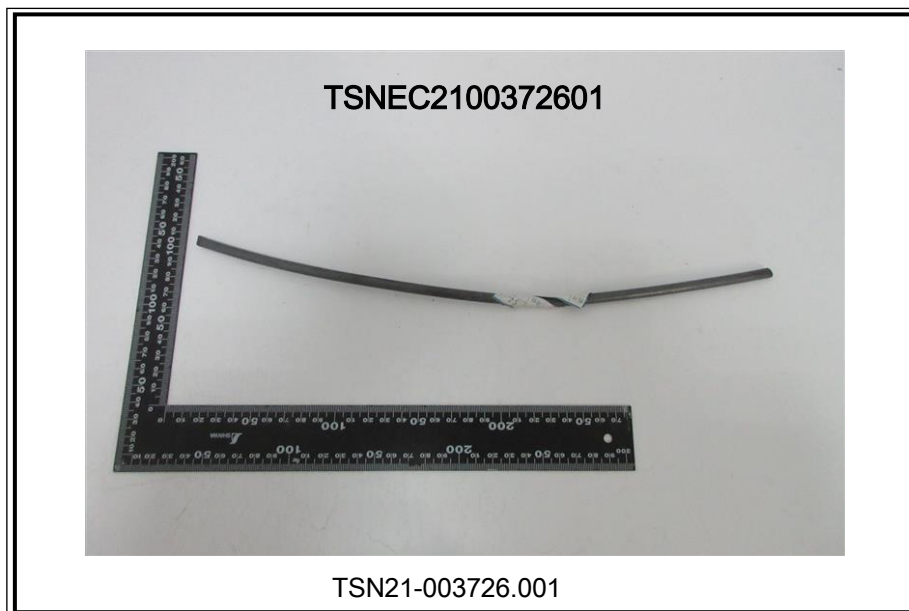
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