

2010年 07月

環境關理 物質 不使用 證明書

會社名：히로세코리아(주)

部 署：품질보증팀

責任者：차 재환 차장



貴社에 販賣하는 製品 및 製品의 使用材料, 包裝材, 製造工程에
含有되는 添加劑 等に 對하여 貴社가 要求하는 管理水準
(使用禁止對象)의 物質을 使用하고 있지 않음을 證明합니다.
當社의 製品 및 製品의 使用材料, 包裝材, 製造工程에 含有되는
添加劑 等に 對하여 以下の 成分으로 構成되어 있음을 報告 합니다.

(1) 製品 使用素材

NO	제품명	부품명	원자재명	원자재 MAKER	비 고
	HIF3FB-10PA-2.54DSA	HOUSING	TRIBIT 1550GN30 BK	SAMYANG CORP	
		CONTACT	C2680	POONGSAN	

(2) 測定可能物質의 ICP Data는 別紙 參照 要望

(3) 測定可能物質의 成分 分析 Data는 別紙 參照 要望

以 上



Test Report No. F690501/LF-CTSAYAA09-31954

Issued Date: November 16, 2009 Page 1 of 4

To: **SAMYANG CORP.**
407 3-ga
Deokjin-gu
Jeongju-city
JEONBUK 561-203
Korea

The following merchandise was submitted and identified by the client as :

Product Name : TRIBIT 1550GN30 BK(H)
SGS File No. : AYAA09-31954
Received Date : November 12, 2009
Test Performing Date : November 13, 2009
Test Performed : SGS Testing Korea tested the sample(s) selected by applicant with following results
Test Results : For further details, please refer to following page(s)

Pluto Kim
Cindy Park
Jinee Song/ Testing Person

SGS Testing Korea Co. Ltd.

Jeff Jang / Chemical Lab Mgr

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Test Report No. F690501/LF-CTSAYAA09-31954

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Sample No. : AYAA09-31954.001
 Sample Description : TRIBIT 1550GN30 BK(H)
 Item No./Part No. : N/A

Heavy Metals

Test Items	Unit	Test Method	MDL	Results
Cadmium (Cd)	mg/kg	With reference to IEC 62321:2008, ICP	0.5	N.D.
Lead (Pb)	mg/kg	With reference to IEC 62321:2008, ICP	5	N.D.
Mercury (Hg)	mg/kg	With reference to IEC 62321:2008, ICP	2	N.D.
Hexavalent Chromium (Cr VI)	mg/kg	With reference to IEC 62321:2008, UV-VIS	1	N.D.

Flame Retardants-PBBs/PBDEs

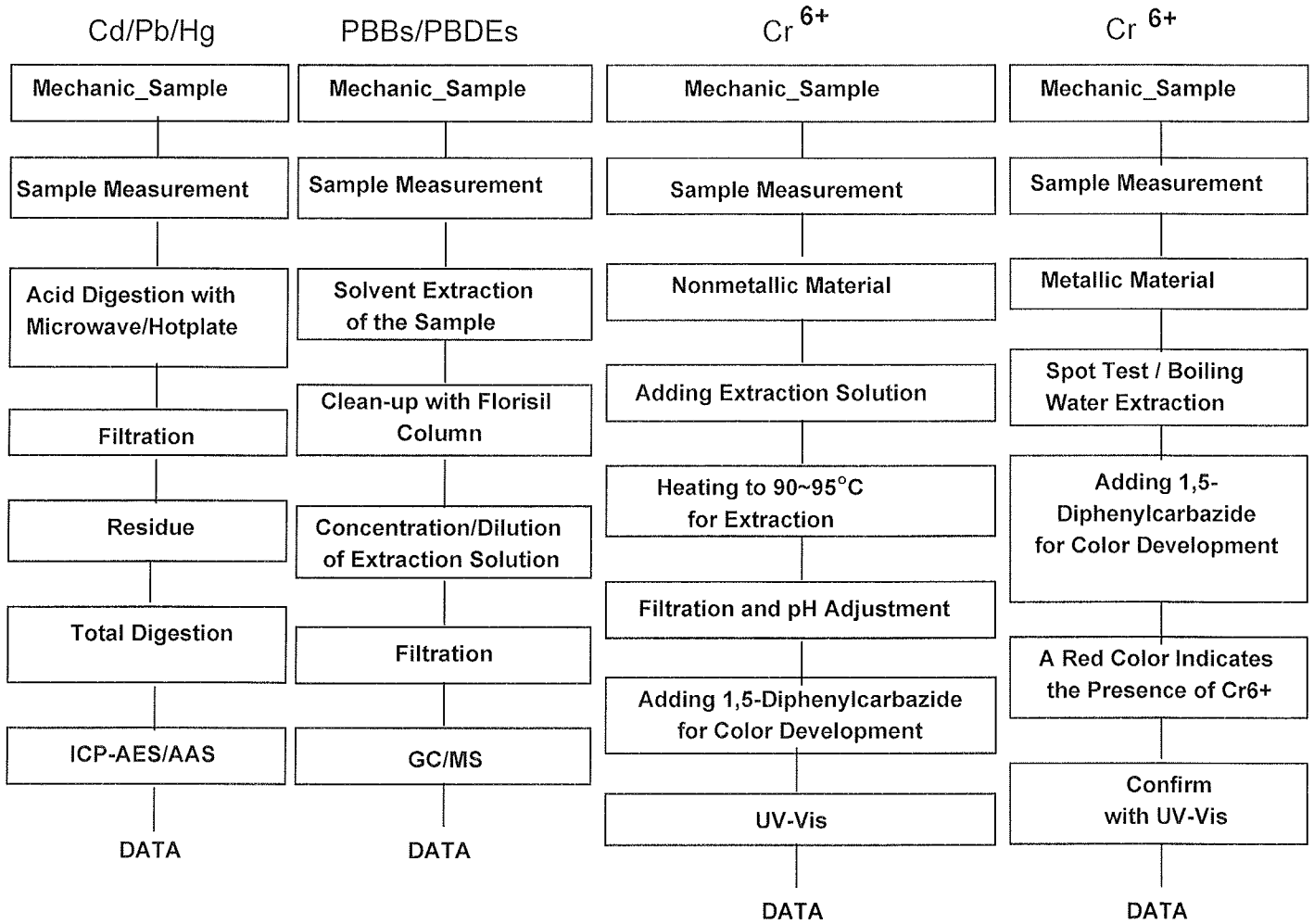
Test Items	Unit	Test Method	MDL	Results
Monobromobiphenyl	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Dibromobiphenyl	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Tribromobiphenyl	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Tetrabromobiphenyl	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Pentabromobiphenyl	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Hexabromobiphenyl	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Heptabromobiphenyl	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Octabromobiphenyl	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Nonabromobiphenyl	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Decabromobiphenyl	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Monobromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Dibromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Tribromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Tetrabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Pentabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Hexabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Heptabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Octabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Nonabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	N.D.
Decabromodiphenyl ether	mg/kg	With reference to IEC 62321:2008, GC-MS	5	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) * = Boiling-water-extraction:
 Negative = Absence of CrVI coating
 Positive = Presence of CrVI coating; the detected concentration in boiling-water-extraction solution is equal or greater than 0.02 mg/kg with 50 cm2 sample surface area.

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 Unless otherwise stated the results shown in this test report refer only to the sample(s) tested and such sample(s) are retained for 180 days only.



Testing Flow Chart for RoHS: Cd/Pb/Hg/Cr⁶⁺/PBBs&PBDEs Testing



*** End ***

- NOTE:
- (1) N.D. = Not detected. (<MDL)
 - (2) mg/kg = ppm
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 - (4) - = No regulation
 - (5) ** = Qualitative analysis (No Unit)
 - (6) * = Boiling-water-extraction:
 Negative = Absence of CrVI coating
 Positive = Presence of CrVI coating; the detected concentration in boiling-water-extraction solution is equal or greater than 0.02 mg/kg with 50 cm² sample surface area.

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MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING()

PRODUCT NAME() TRIBIT 1550GN30

SUPPLIER()

263

2. COMPOSITION/INFORMATION ON INGREDIENTS

GENERAL DESCRIPTION OF CHEMICAL CHARACTER(,)

Polybutylene Terephthalate

HAZARDOUS INGREDIENTS() CAS NO HAZARD RISK PHRASES SYMBOL

PolyButyleneterephthalate : 026062-94-2

Flame retardant : 68928-70-1, 001309-64-4

Glass fiber : 065997-17-3 (30%)

3. HAZARDOUS IDENTIFICATION()

4. FIRST AID MEASURES()

EYES() 가

SKIN()

INGESTION()

5. FIRE FIGHTING MEASURES()

EXTINGUISHING MEDIA ()

, , , FOAM, ,

UNUSUAL FIRE AND EXPLOSION HAZARD()

PROTECTIVE EQUIPMENT()

가

PRODUCT NAME : TRIBIT 1550GN30

6. ACCIDENTAL RELEASE MEASURES()

-
-

7. HANDLING AND STORAGE()
HANDLING()

HOOD가 HOOD가
(, , ,) GAS
STORAGE()

8. EXPOSURE CONTROLS/PERSONAL PROTECTION()
가

9. PHYSICAL AND CHEMICAL PROPERTIES()

Forms() PELLET
Color()
Odour()
PH()
Boiling point ()()
Melting point ()() 224
Flammability() V-0 (UL94)
Solubility in water()
Specific gravity() 1.59
Viscosity()
Bulk density
Decomposition temperature()

10 STABILITY AND REACTIVITY()

STABILITY()

INCOMPATIBILITY() 가

HAZARDOUS DECOMPOSITION PRODUCTS()

Aliphatic THF 1,3-butadiene, Toluene, Benzoic acid, terephthalic acid가
가



Test Report No. F690501/LF-CTSAYAU09-04911

Issued Date: November 11, 2009 Page 1 of 3

To: **POONGSAN CORPORATION**
611 Daejung-ri Onsan-eup
Uiju
ULSAN
KOREA

The following merchandise was submitted and identified by the client as :

Product Name : C2680
SGS File No. : AYAU09-04911
Received Date : November 04, 2009
Test Performing Date : November 05, 2009
Test Performed : SGS Testing Korea tested the sample(s) selected by applicant with following results
Test Results : For further details, please refer to following page(s)
Conclusion : Based on the performed tests on submitted sample(s), the results **comply with the** RoHS Directive 2002/95/EC and its subsequent amendments.

SGS Testing Korea Co. Ltd. / Gimhae Laboratory

Sharpless Park
Annie Lim
Helen Yeo /Testing Person

Thomas Hwang / Gimhae Lab. Mgr

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Test Report No. F690501/LF-CTSAYAU09-04911

Issued Date: November 11, 2009 Page 2 of 3

Sample No. : AYAU09-04911.001

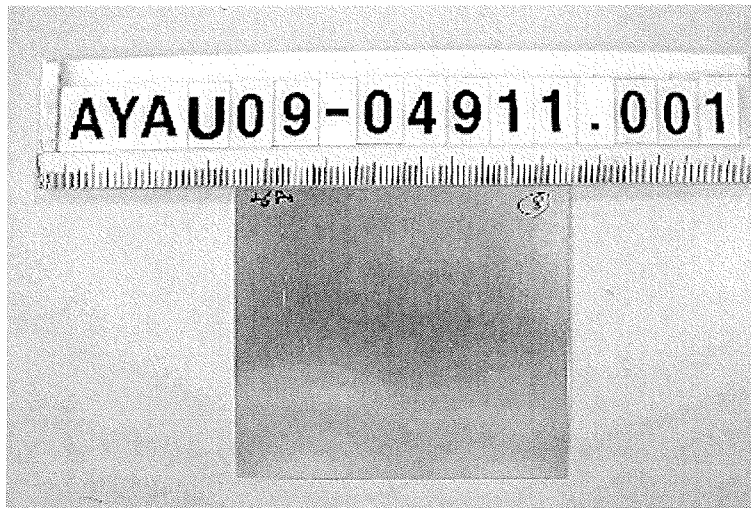
Sample Description : C2680

Item No./Part No. : Brass

Heavy Metals

Test Items	Unit	Test Method	MDL	Results
Cadmium (Cd)	mg/kg	With reference to IEC 62321:2008, ICP	1	N.D.
Lead (Pb)	mg/kg	With reference to IEC 62321:2008, ICP	5	23.0
Mercury (Hg)	mg/kg	With reference to IEC 62321:2008, ICP	2	N.D.
Hexavalent Chromium (Cr VI) By boiling water extraction*	**	With reference to IEC 62321:2008	-	Negative

Picture of Sample as Received:

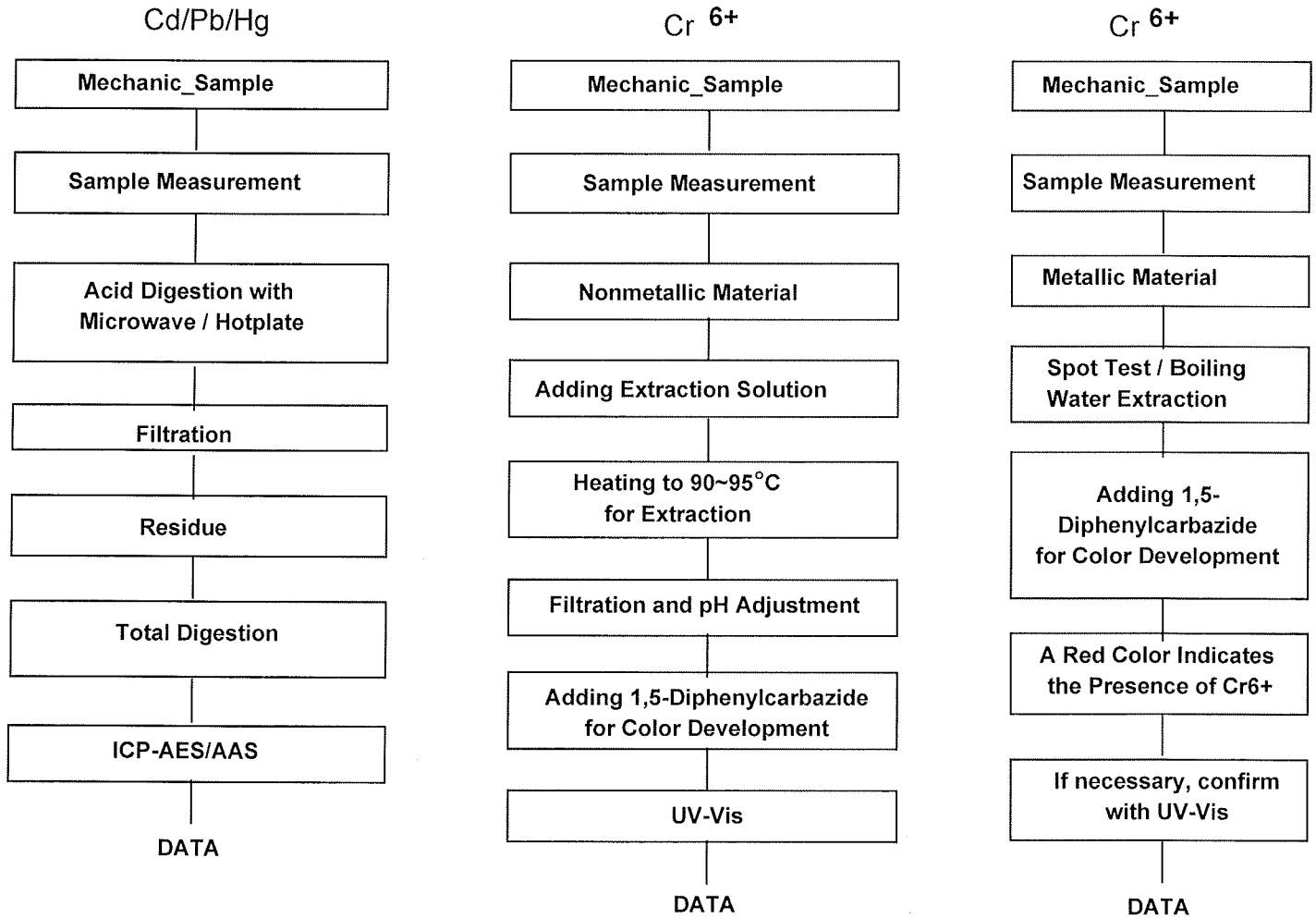


- NOTE:
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 - (2) mg/kg = ppm
 - (3) MDL = Method Detection Limit
 - (4) - = No regulation
 - (5) ** = Qualitative analysis (No Unit)
 - (6) * = Boiling-water-extraction:
 - Negative = Absence of CrVI coating
 - Positive = Presence of CrVI coating; the detected concentration in boiling-water-extraction solution is equal or greater than 0.02 mg/kg with 50 cm² sample surface area.

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Testing Flow Chart for RoHS: Cd/Pb/Hg/Cr⁶⁺ Testing



The samples were dissolved totally by pre-conditioning method according to above flow chart for Cd,Pb,Hg.

Operator Sharpless Park
Section Chief Thomas Hwang

*** End ***

- NOTE:
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 - (2) mg/kg = ppm
 - (3) MDL = Method Detection Limit
 - (4) - = No regulation
 - (5) ** = Qualitative analysis (No Unit)
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Date Issued	08.11.24
Revision No	1

POONGSAN

MATERIAL SAFETY DATA SHEET

COPPER & BRASS SALES -- BRASS STRIP, PLATE, WIRE(C2600, C2680, C2700, C2800)
MATERIAL SAFETY DATA SHEET

Part Number/Trade Name: BRASS STRIP, PLATE, WIRE

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General Information

=====

Item Name: BRASS STRIP, PLATE, WIRE (C2600, C2680, C2700, C2800)

Company's Name: POONGSAN CORPORATION

Company's Street: 611 DAEJUNG-RI ONSAN-UP ULJU-KUN

Company's City: ULSAN

Company's Country: SOUTH KOREA

Company's Zip Code: 689-890

Company's Emerg Ph #: 81-52-231-9165

Company's Info Ph #: 81-52-231-9400

=====

Ingredients/Identity Information

=====

Proprietary: NO

Ingredient: COPPER (DUST & MIST)

Ingredient Sequence Number: 01

Percent: Cu 60-71.5

NIOSH (RTECS) Number: GL5325000

CAS Number: 7440-50-8

OSHA PEL: 0.1 MG(CU)/M3 (FUME)

ACGIH TLV: 0.2 MG/M3 (FUME)

Other Recommended Limit: 1 MG(CU)/M3 (DUST)

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Proprietary: NO

Ingredient: ZINC OXIDE *96-2*

Ingredient Sequence Number: 02

Percent: 28.5-40

NIOSH (RTECS) Number: ZH4810000

CAS Number: 1314-13-2

OSHA PEL: 5 MG/CUM

ACGIH TLV: 5 MG/CUM

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Physical/Chemical Characteristics

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Appearance And Odor: SILVER / YELLOW TO RED COLOR SOLID W/NO ODOR.

Melting Point: 1290-2260F

Specific Gravity: 8.40-8.50
Solubility In Water: INSOLUBLE

=====
Fire and Explosion Hazard Data
=====

Extinguishing Media: USE SPECIAL MIXTURES OF DRY CHEMICAL/SAND.
Special Fire Fighting Proc: WEAR NIOSH/MSHA SCBA & PROTECTIVE CLOTHING.
Unusual Fire And Expl Hazrds: SOLID MASSIVE FORM ISN'T COMBUSTIBLE. MOLTEN METAL MAY REACT VIOLENTLY W/WATER.

=====
Reactivity Data
=====

Stability: YES
Cond To Avoid (Stability): WATER, HEAT, FLAMES, CHEMICAL REACTIONS.
Materials To Avoid: OXIDIZERS, ACIDS, BASES
Hazardous Decomp Products: METAL FUME.
Hazardous Poly Occur: NO

=====
Health Hazard Data
=====

Route Of Entry - Inhalation: YES
Route Of Entry - Skin: YES
Route Of Entry - Ingestion: YES
Health Haz Acute And Chronic: COPPER-INHALATION: FUMES MAY CAUSE METAL FUME FEVER. SKIN: DERMATITIS, KERATINIZATION OF THE HANDS & THE SOLES OF THE FEET. COPPER DUST & FUME CAUSES IRRITATION OF THE UPPER RESPIRATORY TRACT.
Carcinogenicity - NTP: NO
Carcinogenicity - IARC: NO
Carcinogenicity - OSHA: NO
Explanation Carcinogenicity: NONE
Signs/Symptoms Of Overexp: COPPER-FLU-LIKE SYMPTOMS, SKIN & HAIR DISCOLORATION, METALLIC TASTE IN THE MOUTH, NAUSEA.

Emergency/First Aid Proc: EYES: FLUSH W/RUNNING WATER. SKIN: VACUUM OFF EXCESS DUST. WASH W/SOAP & WATER. INHALATION: REMOVE TO FRESH AIR. OBTAIN MEDICAL ATTENTION IN ALL CASES.

=====
Precautions for Safe Handling and Use
=====

Steps If Matl Released/Spill: LARGE: REMOVE BY VACUUMING/WET SWEEPING TO PREVENT HEAVY CONCENTRATION OF AIRBORNE DUST. IF LIQUIDS CONTAINING SOLUBILIZED METAL ARE SPILLED EVACUATE AREA. ABSORB BY MEANS OF VERMICULITE, DRY SAND/SIMILAR MATERIAL. (SEE SUPP)
Waste Disposal Method: DISPOSE OF IAW/FEDERAL, STATE & LOCAL REGULATIONS.

Precautions-Handling/Storing: STORE AWAY FROM INCOMPATIBLE MATERIALS & KEEP DUST FROM IGNITION SOURCES.

=====
Control Measures
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Respiratory Protection: IF EXPOSURE ABOVE THE PEL/TLV, WEAR NIOSH/MSHA APPROVED RESPIRATOR.

Ventilation: LOCAL EXHAUST VENTILATION.

Protective Gloves: REQUIRED

Eye Protection: SAFETY GLASSES W/SIDE SHIELDS

Other Protective Equipment: FACE SHIELDS, SPECIALLY TINTED GLASS.

Suppl. Safety & Health Data: SPILLS CONT'D: CLEANUP PERSONNEL SHOULD WEAR RESPIRATORS & PROTECTIVE CLOTHING. VENTILATE AREA.

=====
Transportation Data
=====

=====
Disposal Data
=====

Person in charge :

Tel : 82-52-239-9383

Fax : 82-52-239-9400