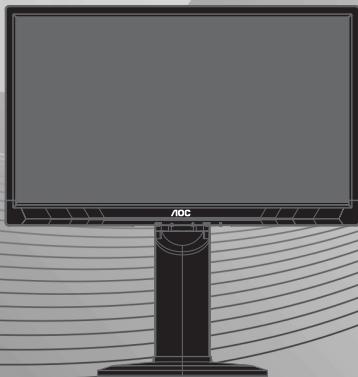




Manual do Usuário do Monitor LCD **E2223PWD**



www.aoc.com
©2013 AOC. Todos os Direitos Reservados.

ÍNDICE

PARA SUA SEGURANÇA	2
Declaração EPEAT	5
PRECAUÇÕES	8
NOTAS ESPECIAIS SOBRE OS MONITORES LCD.....	9
ANTES DE OPERAR O MONITOR	10
RECURSOS	10
LISTA DO PACOTE.....	10
INSTRUÇÕES DE INSTALAÇÃO	11
CONTROLES E CONECTORES	12
AJUSTE DO ÂNGULO DE VISÃO.....	13
INSTRUÇÕES OPERACIONAIS.....	14
INSTRUÇÕES GERAIS.....	14
PAINEL DE CONTROLE FRONTAL	15
COMO AJUSTAR UMA CONFIGURAÇÃO	16
AJUSTANDO A IMAGEM.....	17
PLUG & PLAY	18
SUPORTE TÉCNICO (PERGUNTAS FREQUENTES).....	19
MENSAGEM DE ERRO & POSSÍVEL SOLUÇÃO.....	20
APÊNDICE	21
ESPECIFICAÇÕES	21
TABELA DE TEMPORIZAÇÃO PREDETERMINADA PELA FÁBRICA.....	22
ATRIBUIÇÃO DOS PINOS DOS CONECTORES.....	23

PARA SUA SEGURANÇA

Antes de operar o monitor, leia este manual completamente. Este manual deve ser guardado para futuras consultas.

Declaração de Interferência de Freqüência de Radio de Classe B do FCC

ADVERTÊNCIA: (PARA MODELOS CERTIFICADOS PELA FCC)

NOTA: Este dispositivo foi testado e está em conformidade com os limites para um dispositivo digital de Classe B pertencente à Parte 15 das Normas da FCC. Estes limites foram criados para fornecer uma proteção razoável contra interferências nocivas em instalações residenciais. Este equipamento gera, usa e pode emitir energia de frequência de rádio, se este equipamento não for instalado e usado de acordo com as instruções do fabricante, poderá provocar interferências em comunicações de rádio. Contudo, não existem garantias de que não ocorrerão interferências numa determinada instalação. Caso este equipamento cause interferências prejudiciais à recepção de rádio e televisão, o que pode ser determinado ligando e desligando o equipamento, o usuário deverá corrigir as interferências através de uma ou mais medidas que se seguem:

1. Reoriente ou coloque num outro local a antena de recepção.
2. Aumente a separação entre o equipamento e o receptor.
3. Conecte o equipamento a uma tomada em um circuito diferente daquele o qual o receptor está conectado.
4. Consulte o vendedor ou peça ajuda a um técnico de rádio/televisão experiente.

AVISO:

1. As mudanças ou modificações que não sejam expressamente aprovadas pela parte responsável pela conformidade poderá anular a autoridade do usuário de utilizar o produto.
2. Cabos de interface blindados e cabos de alimentação CA, se houver, devem ser utilizados de modo a estar em conformidade com os limites de emissões.
3. O fabricante não é responsável por nenhuma interferência de rádio ou de TV causada por modificações não-autorizadas neste equipamento. É a responsabilidade do usuário de corrigir essas interferências.

Declaração WEEE

Eliminação de Equipamento e Lixo Doméstico Pelo Usuário na União Européia.



Este símbolo afixado sobre o produto ou na sua embalagem indica que ele não deverá ser eliminado juntamente com os outros lixos domésticos. Ao invés disso, é sua responsabilidade o de descartar-se de seu equipamento usado em pontos de coleta designados para a reciclagem de equipamento elétrico e eletrônico inutilizáveis. A coleta separada e a reciclagem do seu equipamento usado ajudarão a preservar os recursos naturais e garantir que seja reciclado de modo a proteger a saúde humana e o meio ambiente. Para obter maiores informações sobre os pontos de coleta de equipamento inutilizável para reciclagem, contacte o escritório local da cidade, seu serviço de coleta de lixo doméstico ou a loja de onde você comprou o produto.

EPA Energy Star



ENERGY STAR® é uma marca registrada dos EUA. Como um Parceiro da ENERGY STAR®, AOC International (Europa) BV e Envision Peripherals, Inc. determinaram que este produto satisfaz as diretrizes da ENERGY STAR® para eficiência de energia.
(PARA MODELOS CERTIFICADOS POR EPA GOLD)

Declaração EPEAT



EPEAT é um sistema que ajuda os compradores nos setores públicos e privados a avaliar, comparar e selecionar computadores de mesa, computadores portáteis e monitores com base nos seus atributos ambientais. EPEAT também proporciona um conjunto claro e consistente de critério de performance para o design de produtos, e proporciona uma oportunidade para os fabricantes de obterem o reconhecimento do mercado pelos esforços para reduzir o impacto ambiental dos seus produtos.

AOC acredita na proteção do ambiente.

Com uma preocupação essencial para a conservação dos recursos naturais, bem como a proteção dos aterros sanitários, AOC anuncia o lançamento do programa de reciclagem da embalagem do monitor: a AOC. Este programa é projetado para ajudar-lhe a descartar a caixa do seu monitor e os materiais de enchimento corretamente. Se o centro de reciclagem local não estiver disponível, AOC irá reciclar o material da embalagem para você, incluindo a espuma de enchimento e a embalagem. A solução de Monitor AOC apenas reciclará embalagem do monitor. Por favor consulte o seguinte endereço da website:

Somente para a América do Norte e do Sul, excluindo o Brasil:

http://us.aoc.com/about/environmental_impact

Para a Alemanha:

<http://www.aoc-europe.com/en/service/tco.php>

Para o Brasil:

http://www.aoc.com.br/2007/php/index.php?req=pagina&pgn_id=134

(PARA MODELOS CERTIFICADOS POR EPEAT GOLD)

Congratulations!

This product is designed for both you and the planet!



TCO Development works for sustainable IT - manufacture, use and recycling of IT products reflecting environmental, social and economic responsibility.

TCO Certified is a third party verified program, where every product model is tested by an accredited impartial test laboratory. TCO

Certified represents one of the toughest certifications for ICT products worldwide.

Some of the Usability features of TCO Certified Displays:

- Visual Ergonomics for image quality is tested to ensure top performance and reduce sight and strain problems. Important parameters are Resolution, Luminance, Contrast, Reflection and Colour characteristics
- Products are tested according to rigorous safety standards at impartial laboratories
- Electric and magnetic fields emissions as low as normal household background levels
- Workload ergonomics to ensure a good physical environment

Some of the Environmental features of TCO Certified Displays:

- Production facilities have an Environmental Management System (EMAS or ISO 14001)
- Low energy consumption to minimize climate impact
- Restrictions on Chlorinated and Brominated flame retardants, plasticizers, plastics and heavy metals such as cadmium, mercury and lead (RoHS compliance)
- Both product and product packaging is prepared for recycling
- The brand owner offers take-back options

Corporate Social Responsibility

- The brand owner demonstrates the product is manufactured under working practices that promote good labour relations and working conditions.

The Criteria Document can be downloaded from our web site. The criteria included in this label have been developed by TCO Development in co-operation with scientists, experts, users as well as manufacturers all over the world. Since the end of the 1980s TCO has been involved in influencing the development of IT equipment in a more user and environmentally friendly direction. Our ICT product labeling system began in 1992 and is now requested by users and ICT-manufacturers all over the world.

For more information, please visit
www.tcodevelopment.com

TCO Certified Document for Displays version 2.3



Technology for you and the planet

(PARA MODELOS CERTIFICADOS POR TCO GOLD)

ADVERTÊNCIA:

A fim de prevenir incêndio ou explosão, não exponha o monitor sob chuva ou a um ambiente úmido. O monitor está carregado com alta voltagem perigosa. Não abra o compartimento. Se alguma manutenção for requerida, procure assistência do pessoal de manutenção profissional.

PRECAUÇÕES

- Não coloque o monitor próximo a fontes de água, tais como banheiros, lavadoras de louça, cozinha, máquinas de lavar, piscinas ou porões úmidos
- Não coloque o monitor sobre um carrinho instável, suporte ou mesa. Se o monitor cair, ele pode ferir uma pessoa, e danificar o equipamento. Use somente um carrinho ou suporte recomendado pelo fabricante ou vendido com o monitor. Se o monitor precisa ser montado sobre uma parede ou uma estante, a instalação deve ser aprovada pelo fabricante e deve ser instalada estritamente de acordo com as instruções.
- Fendas e aberturas atrás e embaixo do gabinete são usadas para ventilação. Para garantir a operação confiável do monitor e evitar sobreaquecimento, estas aberturas de ventilação não devem ser bloqueadas ou cobertas. O monitor não pode ser colocado sobre camas, sofás, carpetes e outras superfícies similares. Ele também não pode ser colocado perto de radiadores ou sobre fontes de calor. A menos que o fluxo de ar seja garantido, não coloque o monitor sobre estantes de livros ou em caixas.
- O monitor deve ser operado somente com o tipo de fonte de energia indicada na etiqueta. Se não tiver certeza do tipo de energia fornecido na sua casa, consulte seu revendedor ou companhia elétrica local.
- Este monitor está equipado com um plugue terra trifásico, que possui uma extremidade que se conecta a terra. Por motivos de segurança, o plugue deve ser conectado a um soquete de energia que esteja aterrado. Se o plugue trifásico não puder ser inserido no seu soquete, procure um eletricista e instale um soquete correto, ou use um adaptador para conectar seguramente o equipamento a terra. Não mude as funções de segurança do plugue aterrado.
- Quando o monitor não estiver a ser usado por longos períodos de tempo, desligue a energia. Isto pode prevenir dano causado por choques elétricos e voltagens anormais de energia durante as tempestades.
- Não deixe sobrecarregar as extensões e tomadas elétricas. Sobrecarregamento pode causar incêndio ou choque elétrico.
- Não empurre nenhum objeto para dentro das fendas do gabinete do monitor. Isto pode causar curto circuito e resultar em incêndio ou choque elétrico. Nunca derrame líquidos no monitor.
- Não tente reparar o monitor por conta própria; a abertura ou remoção de tampas pode expor-lhe a altas voltagens e outros perigos. Favor, entregar todo o serviço ao pessoal de serviço qualificado.
- Para assegurar operação satisfatória, use o monitor apenas com computadores listados pela UL, que possuam receptáculos apropriadamente configurados entre 100 – 240 Volts CA, e um mínimo de 5A.
- Os soquetes de parede devem ser instalados perto do equipamento e devem ser facilmente acessíveis.

NOTAS ESPECIAIS SOBRE OS MONITORES LCD

Os sintomas a seguir são normais com monitor LCD e não indicam nenhum problema.

NOTAS

- Devido à natureza da luz fluorescente, a tela pode piscar durante o uso inicial. Desligue o interruptor e em seguida ligue-o novamente para assegurar-se de que a piscagem haja desaparecido.
- Você pode encontrar brilho ligeiramente irregular na tela dependendo do padrão da área de trabalho utilizada.
- A tela LCD tem 99.99% ou mais pixéis efetivos. Pode incluir manchas de 0.01% ou menos tal como a falta de um pixél ou um pixél aceso o tempo todo.
- Devido à natureza da tela LCD, uma imagem posterior deixada pela tela anterior pode permanecer depois de trocar a imagem, quando a mesma imagem há sido exibida por horas. O monitor se recuperará lentamente disto.
- Se a tela se escurece, pisca ou não aparece, contate o revendedor ou o centro de manutenção para mudar os componentes relacionados. Não repare a tela por conta própria!

ANTES DE OPERAR O MONITOR

RECURSOS

- Monitor LCD a cores TFT de 54.7 cm (21.5")
- Tela Clara, Brilhante para Windows
- Resoluções Recomendadas: 1920 x 1080@60 Hz
- Projeto ergonômico
- Economizador de espaço, Design de Caixa Compacta

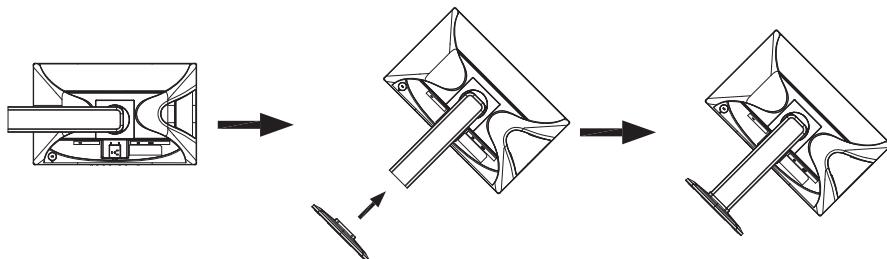
LISTA DO PACOTE

O pacote inclui os seguintes items:

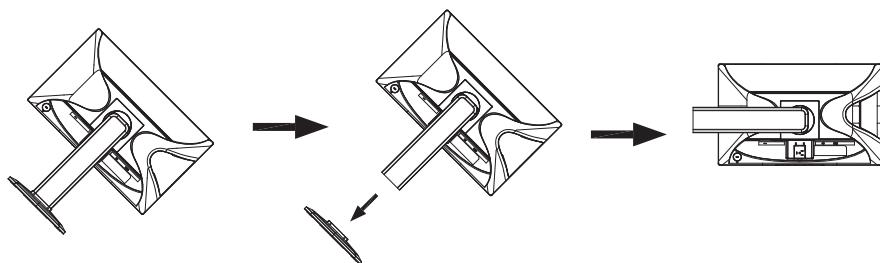
1. Monitor LCD
2. Manual do usuário
3. Cabo de Alimentação
4. Cabo D-SUB
5. Cartão de garantia

INSTRUÇÕES DE INSTALAÇÃO

Instalar a base:



Remover a base:



CABO DE ALIMENTAÇÃO

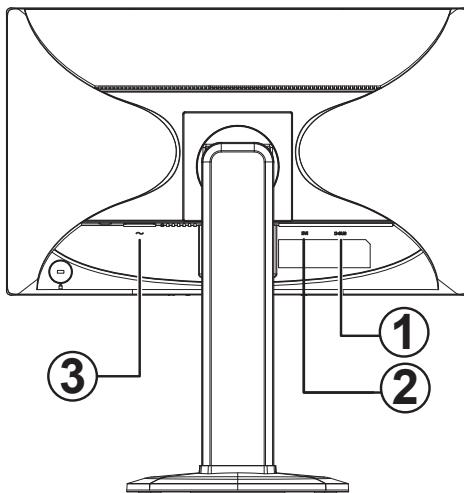
Fonte de Energia:

1. Certifique-se que o cabo de alimentação é o tipo correto exigido na área da instalação.
2. Este monitor LCD tem uma fonte de alimentação que permite a operação tanto em 100/120 Volts CA ou em 220/240 Volts CA (não são necessários ajustes por parte do usuário).
3. Conecte o cabo de alimentação no soquete de entrada de energia de seu monitor, e ligue a outra extremidade em uma tomada de CA de três pinos. O cabo de alimentação pode ser conectado em uma tomada na parede, ou no soquete de saída de seu PC, dependendo do tipo de cabo de alimentação que vem com o seu monitor LCD.

CONTROLES E CONECTORES

CABO DE SINAL

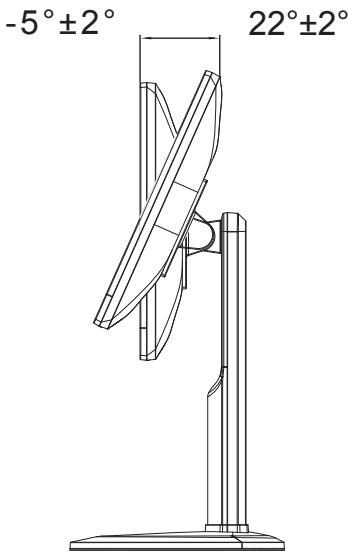
- **Conectando o cabo de sinal D-Sub:** Conecte o cabo de sinal de 15 pinos na parte traseira do monitor e na porta VGA do computador.
- **Conectando o cabo de sinal DVI:** Conecte uma extremidade do cabo DVI à parte de trás do monitor e conecte a outra extremidade à porta DVI do computador.
- **Conectando o Cabo de Alimentação:** Conecte o cabo de alimentação CA na tomada de entrada AC do monitor LCD e na tomada de parede.
- **Cuidado:** Se a tomada de parede AC não estiver aterrada (com três orifícios), instale o adaptador de aterramento adequado (não fornecido).



1.	Entrada de sinal D-SUB
2.	Entrada de sinal DVI
3.	Entrada de energia

AJUSTE DO ÂNGULO DE VISÃO

- Para uma visualização ideal, recomenda-se olhar a face completa do monitor e, a seguir, ajustar o ângulo do monitor de acordo com sua preferência.
- Segure a base para que o monitor não tombe ao alterar o ângulo do monitor.
- Você poderá ajustar o ângulo do monitor de $-5^{\circ}\pm2^{\circ}$ a $22^{\circ}\pm2^{\circ}$.



NOTAS

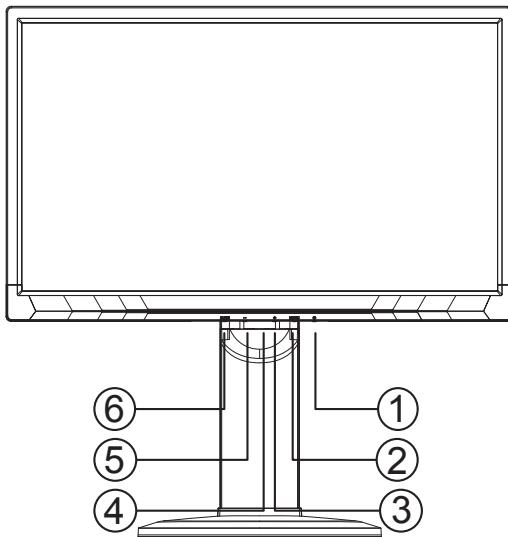
- Não toque a tela de LCD ao alterar o ângulo. Isso pode danificar ou quebrar a tela de LCD.
- Tome cuidado para não prender seus dedos ou as suas mãos ao ajustar o ângulo.

INSTRUÇÕES OPERACIONAIS

INSTRUÇÕES GERAIS

Pressione o interruptor para ligar ou desligar o monitor. Os outros botões de controle estão localizados na parte lateral do monitor (ver Figura 4). Alterando estas configurações, a imagem pode ser ajustada de acordo com suas preferências pessoais.

- O cabo de alimentação deve ser conectado.
- Conecte o cabo de vídeo do monitor à placa de vídeo.
- Pressione o botão de alimentação para ligar o monitor. O indicador de alimentação irá se acender.



CONTROLES EXTERNOS

1.	Interruptor
2.	MENU / ENTRAR
3.	+ / 4:3 ou Amplo
4.	Indicador de Energia
5.	- / Modo ECO
6.	Fonte / Auto / Sair

PAINEL DE CONTROLE FRONTAL

- **Interruptor:**

Pressione este botão para Ligar/Desligar a energia do monitor.

- **Indicador de Energia:**

Azul — Modo Ligado.

Laranja — Modo de Espera.

LED apagado — Modo Desligado.

- **MENU / ENTRAR:**

Menu OSD ativo ou função confirmar ajuste ou Sair do menu OSD quando estiver no estado OSD de Brilho/Contraste.

- **+ / 4:3 ou Amplo:**

Quando não há OSD, pressione + continuamente para alterar 4:3 ou proporção de imagem ampla. (Se o tamanho de tela do produto é 4:3 ou a resolução do sinal de entrada é de formato amplo, a tecla de atalho é desativada para ajuste.)

- **- / Modo ECO:**

Pressione o botão Eco continuamente para selecionar o modo Eco do brilho e DCR quando não houver nenhum OSD. (Tecla de atalho do modo Eco pode não estar disponível em todos os modelos).

- **Fonte / Auto / Sair:**

1. Quando não há nenhum OSD, pressione botão Auto/Fonte continuamente por cerca de 2 segundos para fazer auto configuração.
2. Quando o OSD estiver fechado, pressione o botão Fonte como tecla de atalho da Fonte. Pressione o botão Fonte continuamente para selecionar a fonte de entrada mostrada na barra de mensagens, pressione Menu /Entrar para mudar para a fonte selecionada.

Função de Bloqueio de OSD: Para bloquear o OSD, pressione e segure o botão MENU enquanto o monitor estiver desligado e, em seguida, pressione o botão de alimentação para ligar o monitor. Para desbloquear o OSD, pressione e segure o botão MENU enquanto o monitor estiver desligado e, em seguida, pressione o botão de alimentação para ligar o monitor.

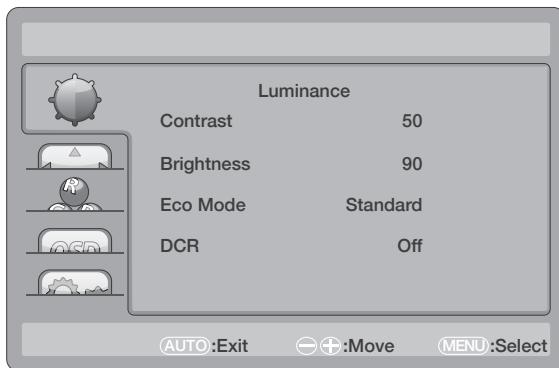
NOTAS

- Não instale o monitor em um local perto de fontes de calor, como radiadores ou dutos de ar, ou em local sujeito à luz solar direta ou poeira excessiva ou vibrações mecânicas ou choques.
- Guarde a caixa original e os materiais de embalagem, porque eles serão úteis se você precisar enviar o seu monitor.
- Para proteção máxima, reembalar seu monitor, como foi originalmente embalado na fábrica.

- Para manter o monitor com aparência de novo, limpe-o periodicamente com um pano macio. As manchas difíceis podem ser removidas com um pano levemente umedecido com uma solução detergente suave. Nunca use solventes fortes como tiner, benzina ou abrasivos, pois podem danificar o gabinete. Como medida de segurança, desligue sempre o monitor antes de limpá-lo.
- Não arranhe a tela com objetos duros, porque podem causar danos permanentes.
- Não derrame líquido no monitor, o que irá resultar em danos ao componente.

COMO AJUSTAR UMA CONFIGURAÇÃO

1. Pressione o botão MENU para exibir o menu OSD.
2. Pressione + ou - para navegar pelos itens do menu. Uma vez que o item desejado seja destacado, pressione o botão MENU para entrar.
3. Pressione + ou - mais uma vez para navegar através do sub-menu. Uma vez que o item desejado seja destacado, pressione o botão MENU para ativá-lo.
4. Pressione + ou - para ajustar a configuração.
5. Para sair e salvar, pressione o botão SAIR. Se deseja ajustar as outras configurações, por favor, repita os passos 2-4.



AJUSTANDO A IMAGEM

As descrições para o controle da função:

Item do Menu Principal	Ícone do Menu Principal	Item de Sub Menu	Sub Menu	Descrição
Luminosidade		Contraste		Contraste a partir do registrador digital
		Brilho		Ajuste da luz de fundo
		Eco	Padrão	Modo Padrão
			Texto	Modo Texto
			Internet	Modo Internet
			Jogo	Modo Jogo
		DCR	Filme	Modo Filme
			Espor tes	Modo Esporte
			Desligado	Desativar relação de contraste dinâmico
			Ligado	Ativar relação de contraste dinâmico
Configuração de Imagem		Relógio		Ajustar Relógio da imagem para reduzir ruído de linhas verticais
		Fase		Ajustar Fase da imagem para reduzir ruído de linhas horizontais
		Posição H.		Ajustar posição vertical da imagem
		Posição V.		Ajustar a posição horizontal da imagem
		Proporção de Imagem	Amplio/4:3	Selecionar Imagem ampla e 4:3
Temp. de Cor		Quente		Reativar Temperatura de Cor Quente do EEPROM
		Normal		Reativar Temperatura de Cor Normal do EEPROM
		Fria		Reativar Temperatura de Cor Fria do EEPROM
		Usuário	Vermelho	Ganho Vermelho do Registrador Digital
			Verde	Ganho Verde do Registrador Digital
			Azul	Ganho Azul do Registrador Digital
		sRGB		Reativar Temperatura de Cor SRGB do EEPROM
Configuração de OSD		Posição H.		Ajustar a posição horizontal do OSD
		Posição V.		Ajustar a posição vertical do OSD
		Tempo limite		Ajustar o Tempo Limite do OSD
		Linguagem		Selecionar o idioma do OSD
Extra		DDC/CI		Ativar/Desativar Suporte DDC/CI
		Reajustar	sim ou não	Reajustar o menu ao padrão
		Informação		Mostrar a informação da fonte de imagem principal

PLUG & PLAY

Recurso Plug & Play DDC2B

Este monitor é equipado com capacidades VESA DDC2B de acordo com o PADRÃO VESA DDC. Isso permite que o monitor informe sua identidade ao sistema hospedeiro e, dependendo do nível de DDC usado, que comunique informações adicionais sobre suas capacidades de exibição.

O DDC2B é um canal bidirecional baseado no protocolo I²C. O hospedeiro pode solicitar informações EDID no canal DDC2B.

ESTE MONITOR APARENTARÁ SER NÃO-FUNCIONAL SE NÃO HOUVER ENTRADA DE SINAL DE VÍDEO. PARA QUE ESTE MONITOR OPERE APROPRIADAMENTE, DEVE HAVER UM SINAL DE ENTRADA DE VÍDEO.

Este monitor está em conformidade com os padrões Green Monitor, conforme definição da Video Electronics Standards Association (VESA) e The Swedish Confederation Employees (NUTEK). Este recurso foi projetado para conservar energia elétrica por meio da redução do consumo de energia elétrica, quando não houver presença de sinal de vídeo. Quando não houver entrada de sinal de vídeo neste monitor, após um período, o mesmo entrará automaticamente no modo Desligado. Isso reduz o consumo interno de energia do monitor. Após a restauração do sinal de vídeo, a energia total é restaurada e o display é automaticamente reativado. Esta aparência é similar ao recurso “Proteção de tela”, exceto que o display estará totalmente desligado. O display é restaurado por meio da pressão de uma tecla no teclado ou por meio de um clique do mouse.

SUporte Técnico (Perguntas Frequentes)

Problema e Pergunta	Solução Possível
LED de energia não está ligado	<ul style="list-style-type: none"> Verifique se o interruptor de liga/desliga está na posição ON. Cabo de alimentação deve ser conectado.
Sem Plug & Play	<ul style="list-style-type: none"> Verifique se o sistema do PC é compatível com o Plug and Play. Verifique se a placa de vídeo é compatível com o Plug and Play. Verifique se o pino D-15 do cabo de vídeo está torto.
A imagem está embacada	<ul style="list-style-type: none"> Ajuste os controles de Contraste e de Brilho.
A imagem se move em saltos ou um padrão em ondas está presente na imagem	<ul style="list-style-type: none"> Mova os dispositivos elétricos que possam causar interferência elétrica.
O LED de energia está ligado (laranja), mas não há sinal de vídeo ou nenhuma imagem.	<ul style="list-style-type: none"> O Interruptor de Energia do Computador deve estar na posição LIGADO. A Placa de Vídeo do Computador deve estar firmemente fixada em seu slot. Certifique-se que o cabo de vídeo do monitor esteja corretamente conectado ao computador. Inspecione o cabo vídeo do monitor de certifique-se que nenhum dos pinos esteja torto. Certifique-se que seu computador esteja operacional pressionando a tecla CAPS LOCK enquanto observa o LED do CAPS LOCK. O LED deve se Ligar ou Desligar após se pressionar a tecla CAPS LOCK.
Falta de uma das cores primárias (VERMELHO, VERDE ou AZUL)	<ul style="list-style-type: none"> Inspecione o cabo de vídeo do monitor e certifique-se que nenhum dos pinos esteja torto.
A imagem da tela não está centralizada ou dimensionada corretamente.	<ul style="list-style-type: none"> Ajuste a freqüência de pixel (RELÓGIO) e FASE ou pressione tecla de atalho (AUTO).
Imagen tem defeitos de cor (branco não parece branco)	<ul style="list-style-type: none"> Ajuste cor RGB ou selecione a temperatura da cor.
Brilho ou contraste ruim	<ul style="list-style-type: none"> Quando o brilho da tela diminui depois de ter sido usada por um determinado período e a função do display é afetada, envie-a para o nosso centro de serviço autorizado para reparação.
Distúrbios horizontais ou verticais na tela	<ul style="list-style-type: none"> Use modo de desligamento de win95/98/2000/ME/XP para ajustar RELÓGIO e FASE ou executar a tecla de atalho (AUTO).

RELÓGIO (freqüência em pixel) controla o número de pixels escaneados por um escaneamento horizontal. Se a freqüência não estiver correta, a tela mostrará faixas verticais e a imagem não terá a largura correta.

FASE ajusta a fase do sinal de relógio do pixel. Com um ajuste de fase errado, a imagem apresenta distorções horizontais na imagem clara.

Para o ajuste da FASE e do RELÓGIO use “padrão de ponto” ou padrão de modo de desligamento Win 95/98/2000/ME/XP.

MENSAGEM DE ERRO & POSSÍVEL SOLUÇÃO

SEM SINAL

1. Verifique se o cabo de sinal está conectado corretamente. Se o conector estiver solto, aperte os parafusos do conector.
2. Verifique se há danos nos pinos de conexão do cabo de sinal de danos.

ENTRADA SEM SUPORTE

O seu computador foi configurado para o modo de exibição inadequada, defina o computador para exibir modo dado na seguinte tabela na página 21.

APÊNDICE

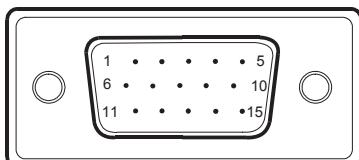
ESPECIFICAÇÕES

Painel LCD	Sistema de condução	TFT Cor LCD 21.5"	
	Tamanho	54.7 cm diagonal	
	Distância entre pixels	0.2482 mm (H) x 0.2482 mm (V)	
Entrada	Vídeo	Interface Analógica R, G, B Digital	
	Sincronização separada	H/V TTL	
	Freqüência-H	30 kHz - 83 kHz	
	Freqüência-V	50 - 76 Hz	
	Cores de visualização	16.7 M Cores	
Relógio de Ponto		170 MHz	
Resolução Máx.		1920 x 1080@60 Hz	
Plug & Play		VESA DDC2B™	
Consumo de energia	Modo Ligado	≤ 18W	
	Modo de Espera	≤ 0.5W	
	Modo DESLIGADO	≤ 0.5W	
Conector de Entrada		D-Sub 15 pinos, DVI-D	
Sinal do Vídeo de Entrada		Analógica: 0.7V p-p (padrão), 75 OHM, Positivo	
Tamanho Máximo da Tela		Horizontal: 476.64 mm Vertical: 268.11 mm	
Fonte de Energia		100 - 240 VAC, 50/60 Hz	
Considerações ambientais		Temp. de Funcionamento: 0° a 40°C Altura de Funcionamento: 0 ~ 3658 m Temp de Armazenamento: -20° a 60°C Umidade de Funcionamento: 15% a 90%	
Dimensões		509.6 (L) x 522.5 (A) x 244.5 (P) mm	
Peso (N.W.)		5.39 kg	
Controles externos	Comutador	Interruptor MENU / ENTRAR + / 4:3 ou Amplo - / Modo ECO Fonte / Auto / Sair	
		Luminosidade	
		Configuração de Imagem	
		Temp de Cor	
		Configuração de OSD	
	Funções	Extra	
Consumo de Energia (Máx)		23 Watts	
Conformidade ao Regulamento		cTUVus, FCC, CE, EPA 6.0, ISO 9241-307, TCO 6.0, EPEAT Gold, INMETRO	

TABELA DE TEMPORIZAÇÃO PREDETERMINADA PELA FÁBRICA

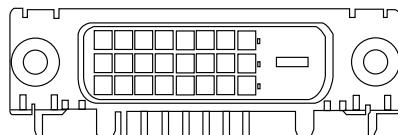
PADRÃO	RESOLUÇÃO	FREQÜÊNCIA HORIZONTAL (KHz)	FREQÜÊNCIA VERTICAL (Hz)
VGA	640x480@60Hz	31.469	59.940
	640x480@72Hz	37.861	72.809
	640x480@75Hz	37.500	75.00
SVGA	800x600@56Hz	35.156	56.250
	800x600@60Hz	37.879	60.317
	800x600@72Hz	48.077	72.188
	800x600@75Hz	46.875	75.000
XGA	1024x768@60Hz	48.363	60.004
	1024x768@70Hz	56.476	70.069
	1024x768@75Hz	60.023	75.029
SXGA	1280x1024@60Hz	63.981	60.020
	1280x1024@75Hz	79.976	75.025
WXGA+	1400x900@60Hz	55.935	59.887
	1400x900@60Hz	55.469	59.901
WSXGA	1680x1050@60Hz	65.290	59.954
	1680x1050@60Hz	64.674	59.883
HD	1920x1080@60HZ	67.500	60.000
	1280x960@60HZ	60.000	60.000
DOS	720x400@70Hz	31.469	70.087
VGA	640x480@67Hz	35.000	66.667
SVGA	832x624@75Hz	49.725	74.551
XGA	1024x768@75Hz	60.241	74.927

ATRIBUIÇÃO DOS PINOS DOS CONECTORES



Cabo de sinal de apresentação das cores de 15 pinos

NO. DO PINO	DESCRIÇÃO	NO. DO PINO	DESCRIÇÃO
1.	Vermelho	9.	+5V
2.	Verde	10.	Terra
3.	Azul	11.	Terra
4.	Terra	12.	Dados de Série DDC
5.	Detectar Cabo	13.	Sincronização H
6.	Terra-R	14.	Sincronização V
7.	Terra-G	15.	Relógio de Série DDC
8.	Terra-B		



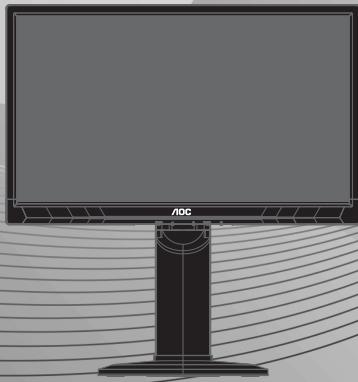
Cabo de sinal de apresentação das cores de 24 pinos

No. do PINO	Descrição	No. do PINO	Descrição
1.	TMDS dados 2-	13.	NC
2.	TMDS dados 2+	14.	+5V energia
3.	TMDS campo de dados 2/4	15.	GND (retorno para +5V sincr. h., sincr. v.)
4.	NC	16.	Detecção de Conexão a Quente
5.	NC	17.	TMDS dados 0-
6.	relógio DDC	18.	TMDS dados 0+
7.	dado DDC	19.	TMDS campo de dados 0/5
8.	NC	20.	NC
9.	TMDS dados 1-	21.	NC
10.	TMDS dados 1+	22.	TMDS campo de relógio
11.	TMDS campo de dados 1/3	23.	Relógio+ TMDS
12.	NC	24.	Relógio- DDCTMDS



LCD Monitor User Manual

E2223PWD



www.aoc.com

©2013 AOC. All Rights Reserved.

English

TABLE OF CONTENT

FOR YOUR SAFETY.....	1
EPEAT Declaration.....	4
PRECAUTIONS	7
SPECIAL NOTES ON LCD MONITORS.....	8
BEFORE YOU OPERATE THE MONITOR	9
FEATURES	9
PACKING LIST.....	9
INSTALLATION INSTRUCTIONS	10
CONTROLS AND CONNECTORS.....	11
ADJUSTING THE VIEWING ANGLE.....	12
OPERATING INSTRUCTIONS.....	13
GENERAL INSTRUCTIONS.....	13
FRONT PANEL CONTROL.....	14
HOW TO ADJUST A SETTING.....	15
ADJUSTING THE PICTURE.....	16
PLUG AND PLAY.....	17
TECHNICAL SUPPORT (FAQ).....	18
ERROR MESSAGE & POSSIBLE SOLUTION.....	19
APPENDIX	20
SPECIFICATIONS	20
FACTORY PRESET TIMING TABLE	21
CONNECTOR PIN ASSIGNMENT.....	22

FOR YOUR SAFETY

Before operating the monitor, please read this manual thoroughly. This manual should be retained for future reference.

FCC Class B Radio Frequency Interference Statement

WARNING: (FOR FCC CERTIFIED MODELS)

NOTE: This equipment has been tested and found to compl with the limits for a Class B digital device, pursuant to Part 15 of the FCC Rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy, and if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

1. Reorient or relocate the receiving antenna.
2. Increase the separation between the equipment and receiver.
3. Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
4. Consult the dealer or an experienced radio/TV technician for help.

NOTICE:

1. The changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.
2. Shielded interface cables and AC power cord, if any, must be used in order to comply with the emission limits.
3. The manufacturer is not responsible for any radio or TV interference caused by unauthorized modification to this equipment. It is the responsibilities of the user to correct such interference.

WEEE Declaration

Disposal of Waste Equipment by Users in Private Household in the European Union.



This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

EPA Energy Star



ENERGY STAR® is a U.S. registered mark. As an ENERGY STAR® Partner, AOC International (Europe) BV and Envision Peripherals, Inc. have determined that this product meets the ENERGY STAR® guidelines for energy efficiency.
(FOR EPA CERTIFIED MODELS)

EPEAT Declaration



EPEAT is a system to help purchasers in the public and private sectors evaluate, compare and select desktop computers, notebooks and monitors based on their environmental attributes. EPEAT also provides a clear and consistent set of performance criteria for the design of products, and provides an opportunity for manufacturers to secure market recognition for efforts to reduce the environmental impact of its products.

AOC believes in protecting the environment.

With a key concern for the conservation of natural resources, as well as landfill protection, AOC announces the launch of AOC monitor's packaging recycling program. This program is designed to help you discard of your monitor carton and filler materials properly. If a local recycling center is not available, AOC will recycle the packaging material for you, including foam filler and carton. AOC Display solution will only recycle AOC monitor packaging. Please refer to the following website address:

Only for North and South American, excluding Brazil:

http://us.aoc.com/about/environmental_impact

For Germany:

<http://www.aoc-europe.com/en/service/tco.php>

For Brazil:

http://www.aoc.com.br/2007/php/index.php?req=pagina&pgn_id=134

(FOR EPEAT GOLD CERTIFIED MODELS)

Congratulations!

This product is designed for both you and the planet!



TCO Development works for sustainable IT - manufacture, use and recycling of IT products reflecting environmental, social and economic responsibility.

TCO Certified is a third party verified program, where every product model is tested by an accredited impartial test laboratory. TCO Certified represents one of the toughest certifications for ICT products worldwide.

Some of the Usability features of TCO Certified Displays:

- Visual Ergonomics for image quality is tested to ensure top performance and reduce sight and strain problems. Important parameters are Resolution, Luminance, Contrast, Reflection and Colour characteristics
- Products are tested according to rigorous safety standards at impartial laboratories
- Electric and magnetic fields emissions as low as normal household background levels
- Workload ergonomics to ensure a good physical environment

Some of the Environmental features of TCO Certified Displays:

- Production facilities have an Environmental Management System (EMAS or ISO 14001)
- Low energy consumption to minimize climate impact
- Restrictions on Chlorinated and Brominated flame retardants, plasticizers, plastics and heavy metals such as cadmium, mercury and lead (RoHS compliance)
- Both product and product packaging is prepared for recycling
- The brand owner offers take-back options

Corporate Social Responsibility

- The brand owner demonstrates the product is manufactured under working practices that promote good labour relations and working conditions.

The Criteria Document can be downloaded from our web site. The criteria included in this label have been developed by TCO Development in co-operation with scientists, experts, users as well as manufacturers all over the world. Since the end of the 1980s TCO has been involved in influencing the development of IT equipment in a more user and environmentally friendly direction. Our ICT product labeling system began in 1992 and is now requested by users and ICT-manufacturers all over the world.

For more information, please visit
www.tcodevelopment.com

TCO Certified Document for Displays version: 2.3



Technology for you and the planet

(FOR TCO CERTIFIED MODELS)

WARNING:

To prevent fire or shock hazard, do not expose the monitor to rain or moisture.

Dangerously high voltages are present inside the monitor. Do not open the cabinet. Refer servicing to qualified personnel only.

PRECAUTIONS

- Do not use the monitor near water, e.g. near a bathtub, washbowl, kitchen sink, laundry tub, swimming pool or in a wet basement.
- Do not place the monitor on an unstable cart, stand, or table. If the monitor falls, it can injure a person and cause serious damage to the appliance. Use only a cart or stand recommended by the manufacturer or sold with the monitor. If you mount the monitor on a wall or shelf, use a mounting kit approved by the manufacturer and follow the kit instructions.
- Slots and openings in the back and bottom of the cabinet are provided for ventilation. To ensure reliable operation of the monitor and to protect it from overheating, be sure these openings are not blocked or covered. Do not place the monitor on a bed, sofa, rug, or similar surface. Do not place the monitor near or over a radiator or heat register. Do not place the monitor in a bookcase or cabinet unless proper ventilation is provided.
- The monitor should be operated only from the type of power source indicated on the label. If you are not sure of the type of power supplied to your home, consult your dealer or local power company.
- The monitor is equipped with a three-pronged grounded plug, a plug with a third (grounding) pin. This plug will fit only into a grounded power outlet as a safety feature. If your outlet does not accommodate the three-wire plug, have an electrician install the correct outlet, or use an adapter to ground the appliance safely. Do not defeat the safety purpose of the grounded plug.
- Unplug the unit during a lightening storm or when it will not be used for long period of time. This will protect the monitor from damage due to power surges.
- Do not overload power strips and extension cords. Overloading can result in fire or electric shock.
- Never push any object into the slot on the monitor cabinet. It could short circuit parts causing a fire or electric shock. Never spill liquids on the monitor.
- Do not attempt to service the monitor by yourself; opening or removing covers can expose you to dangerous voltages and other hazards. Please refer all servicing to qualified service personnel.
- To ensure satisfactory operation, use the monitor only with UL listed computers which have appropriate configured receptacles marked between 100 - 240V AC, Min. 5A.
- The wall socket shall be installed near the equipment and shall be easily accessible.

SPECIAL NOTES ON LCD MONITORS

The following symptoms are normal with LCD monitor and do not indicate a problem.

NOTES

- Due to the nature of the fluorescent light, the screen may flicker during initial use. Turn off the Power Switch and then turn it on again to make sure the flicker disappears.
- You may find slightly uneven brightness on the screen depending on the desktop pattern you use.
- The LCD screen has effective pixels of 99.99% or more. It may include blemishes of 0.01% or less such as a missing pixel or a pixel lit all of the time.
- Due to the nature of the LCD screen, an afterimage of the previous screen may remain after switching the image when the same image has been displayed for a long time. The monitor will slowly recover from this.
- When the screen becomes black or flashing, or cannot illuminate any more, contact your dealer or service center to replace parts. Don't repair the screen by yourself!

BEFORE YOU OPERATE THE MONITOR

FEATURES

- 54.7cm (21.5") TFT Color LCD Monitor
- Crisp, Clear Display for Windows
- Recommend Resolutions: 1920 x 1080@60Hz
- Ergonomic Design
- Space Saving, Compact Case Design

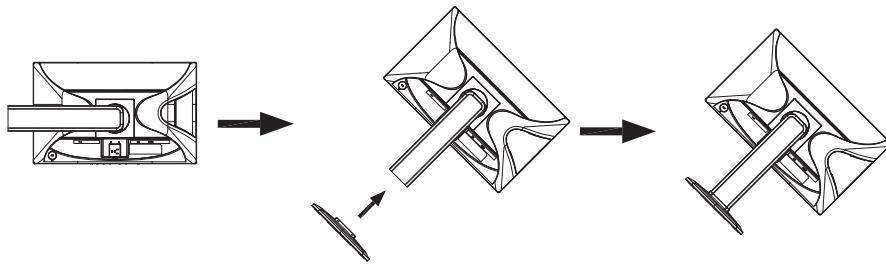
PACKING LIST

The product package should include the following items:

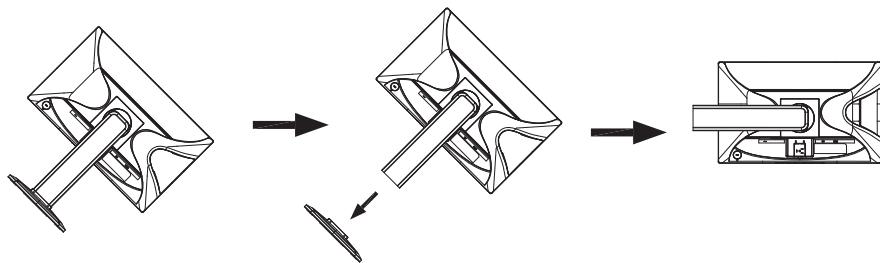
1. LCD Monitor
2. User Manual
3. Power Cord
4. D-SUB Cable
5. Warranty card

INSTALLATION INSTRUCTIONS

Attach base:



Detach base:



POWER CORD

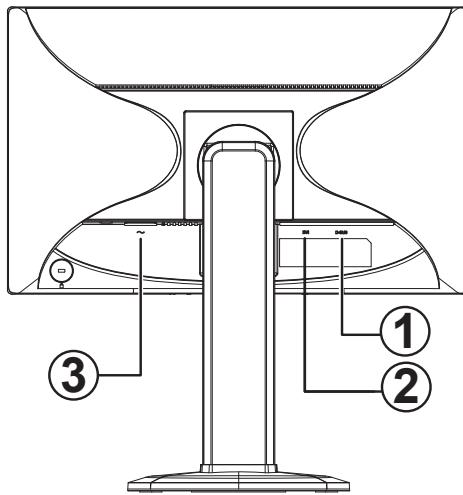
Power Source:

1. Please make sure using the correct power cord in your area.
2. This LCD monitor has an External universal power supply that allows operation in either 100/120V AC or 220/240V AC voltage area (No user adjustment is required.)
3. Connect the AC-power cord into your LCD monitor's power input socket. The AC-power cord may be connected to either a wall power outlet or the power outlet socket on your PC, depending on the type of power cord supplied with your LCD monitor.

CONTROLS AND CONNECTORS

SIGNAL CABLE

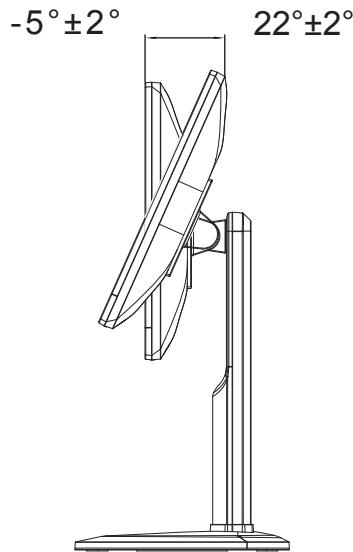
- **Connecting the D-Sub Signal Cable:** Connect the 15-pin signal cable to the back of the monitor and the computer's VGA port.
- **Connecting the DVI Signal Cable:** Connect one end of the DVI cable to the back of the monitor and connect the other end to the computer's DVI port.
- **Connecting the Power Cord:** Connect the AC-power cord to the LCD monitor's AC input socket and the wall outlet.
- **Caution:** If the AC wall outlet is not grounded (with three holes), install the proper grounding adapter (not supplied).



1.	D-SUB Signal input
2.	DVI Signal input
3.	Power input

ADJUSTING THE VIEWING ANGLE

- For optimal viewing, it is recommended to look at the full face of the monitor, then adjust the monitor's angle to your own preference.
- Hold the stand so you do not topple the monitor when you adjust the monitor's angle.
- You are able to adjust the tilted angle from $-5^{\circ}\pm2^{\circ}$ to $22^{\circ}\pm2^{\circ}$.



NOTES

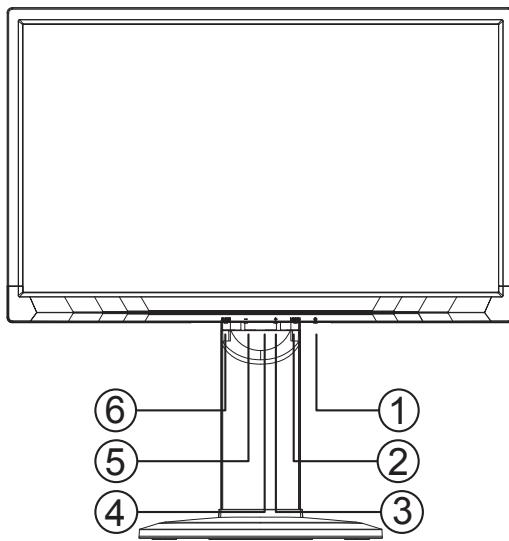
- Do not touch the LCD screen when you adjust the angle. It may cause damage or break the LCD screen.
- Careful attention is required not to catch your fingers or hands when you adjust the angle.

OPERATING INSTRUCTIONS

GENERAL INSTRUCTIONS

Press the power button to turn the monitor on or off. The other control buttons are located on the side of the monitor (See Figure 4). By changing these settings, the picture can be adjusted to your personal preferences.

- The power cord should be connected.
- Connect the video cable from the monitor to the video card.
- Press the power button to turn on the monitor. The power indicator will light up.



EXTERNAL CONTROLS

1.	Power button
2.	MENU / ENTER
3.	+ / 4:3 or Wide
4.	Power indicator
5.	- / ECO Mode
6.	Source / Auto / Exit

FRONT PANEL CONTROL

- **Power Button:**

Press to switch the monitor on or off.

- **Power Indicator:**

Blue — Power On mode.

Orange — Standby mode.

LED off — Off mode.

- **MENU / ENTER:**

Active OSD menu or function adjust confirm or Exit OSD menu when in Brightness/Contrast OSD status.

- **+ / 4:3 or Wide:**

When there is no OSD, press + continuously to change 4:3 or wide image ratio. (If the product screen size is 4:3 or input signal resolution is wide format, the hot key is disable to adjust.)

- **- / ECO Mode:**

Press the Eco key continuously to select the Eco mode of brightness and DCR on when there is no OSD. (Eco mode hot key may not be available in all models).

- **Source / Auto / Exit:**

1. When there is no OSD, press Auto/Source button continuously about 2 second to do auto configure.
2. When the OSD is closed, press Source button will be Source hot key function. Press Source button continuously to select the input source showed in the message bar; press Menu/Enter button to change to the source selected.

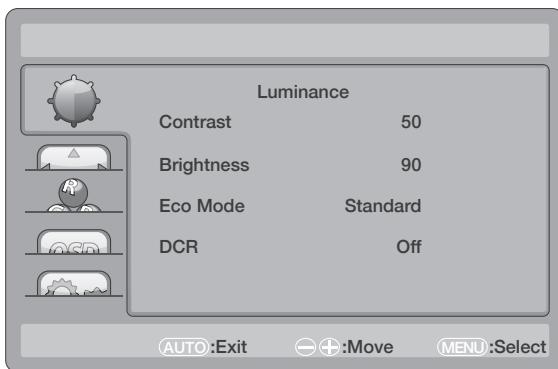
OSD Lock Function: To lock the OSD, press and hold the MENU button while the monitor is off and then press power button to turn the monitor on. To un-lock the OSD, press and hold the MENU button while the monitor is off and then press power button to turn the monitor on.

NOTES

- Do not install the monitor in a location near heat sources such as radiators or air ducts, or in a place subject to direct sunlight, or excessive dust or mechanical vibration or shock.
- Save the original shipping carton and packing materials, as they will come in handy if you ever have to ship your monitor.
- For maximum protection, repackage your monitor as it was originally packed at the factory.
- To keep the monitor looking new, periodically clean it with a soft cloth. Stubborn stains may be removed with a cloth lightly dampened with a mild detergent solution. Never use strong solvents such as thinner, benzene, or abrasive cleaners, since these will damage the cabinet. As a safety precaution, always unplug the monitor before cleaning it.
- Do not scratch the screen with hard things, it may cause permanent damage.
- Don't leak liquid into monitor which will result in the damage of component.

HOW TO ADJUST A SETTING

1. Press the MENU-button to display the OSD menu.
2. Press + or - to navigate through the menu items. Once the desired item is highlighted, press the MENU-button to enter.
3. Press + or - again to navigate through the sub-menu. Once the desired item is highlighted, press MENU-button to activate it.
4. Press + or - to adjust the setting.
5. To exit and save, press the EXIT-button. If you would like to adjust other settings, please repeat steps 2-4.



ADJUSTING THE PICTURE

The descriptions for function control:

Main Menu Item	Main Menu Icon	Sub Menu Item	Sub Menu	Description
Luminance		Contrast		Contrast from Digital-register
		Brightness		Backlight Adjustment
		Eco	Standard	Standard Mode
			Text	Text Mode
			Internet	Internet Mode
			Game	Game Mode
		Movie	Movie	Movie Mode
			Sports	Sports Mode
		DCR	Off	Disable dynamic contrast ratio
			On	Enable dynamic contrast ratio
Image Setup		Clock		Adjust picture Clock to reduce Vertical-Line noise
		Phase		Adjust Picture Phase to reduce Horizontal-Line noise
		H.Position		Adjust the vertical position of the picture
		V.Position		Adjust the horizontal position of the picture
		Image Ratio	Wide/4:3	Select Picture wide and 4:3
Color Temp.		Warm		Recall Warm Color Temperature from EEPROM
		Normal		Recall Normal Color Temperature from EEPROM
		Cool		Recall Cool Color Temperature from EEPROM
		User	Red	Red Gain from Digital-register
			Green	Green Gain Digital-register
			Blue	Blue Gain from Digital-register
		sRGB		Recall SRGB Color Temperature from EEPROM
OSD Setup		H.Position		Adjust the horizontal position of OSD
		V.Position		Adjust the vertical position of OSD
		Timeout		Adjust the OSD Timeout
		Language		Select the OSD language
Extra		DDC/CI		Turn ON/OFF DDC/CI Support
		Reset	yes or no	Reset the menu to default
		Information		Show the information of the main image source

PLUG AND PLAY

Plug & Play DDC2B Feature

This monitor is equipped with VESA DDC2B capabilities according to the VESA DDC STANDARD. It allows the monitor to inform the host system of its identity and, depending on the level of DDC used, communicate additional information about its display capabilities.

The DDC2B is a bidirectional data channel based on the I²C protocol. The host can request EDID information over the DDC2B channel.

THIS MONITOR WILL APPEAR TO BE NON-FUNCTIONAL IF THERE IS NO VIDEO INPUT SIGNAL. IN ORDER FOR THIS MONITOR TO OPERATE PROPERLY, THERE MUST BE A VIDEO INPUT SIGNAL.

This monitor meets the Green monitor standards as set by the Video Electronics Standards Association (VESA) and The Swedish Confederation Employees (NUTEK). This feature is designed to conserve electrical energy by reducing power consumption when there is no video-input signal present. When there is no video input signal this monitor, following a time-out period, will automatically switch to an Standby mode. This reduces the monitor's internal power supply consumption. After the video input signal is restored, full power is restored and the display is automatically redrawn. The appearance is similar to a "Screen Saver" feature except the display is completely off. The display is restored by pressing a key on the keyboard, or clicking the mouse.

TECHNICAL SUPPORT (FAQ)

Problem & Question	Possible Solution
Power LED is not on	<ul style="list-style-type: none"> Check if the Power Switch is in the ON position. Power Cord should be connected.
No Plug & Play	<ul style="list-style-type: none"> Check if the PC system is Plug & Play compatible. Check if the Video Card is Plug & Play compatible. Check if the D-15 plug pin of Video Cable is bent.
Picture is fuzzy	<ul style="list-style-type: none"> Adjust the Contrast and Brightness Controls.
Picture bounces or a wave pattern is present in the picture	<ul style="list-style-type: none"> Move electrical devices that may cause electrical interference.
The power LED is ON (orange) but there's no video or no picture.	<ul style="list-style-type: none"> Computer Power Switch should be in the ON position. Computer Video Card should be snugly seated in its slot. Make sure monitor's video cable is properly connected to the computer. Inspect monitor's video cable and make sure none of the pins are bent. Make sure computer is operational by hitting the CAPS LOCK key on the keyboard while observing the CAPS LOCK LED. The LED should either turn ON or OFF after hitting the CAPS LOCK key.
Missing one of the primary colors (RED, GREEN, or BLUE)	<ul style="list-style-type: none"> Inspect the monitor's video cable and make sure that none of the pins are bent.
Screen image is not centered or sized properly.	<ul style="list-style-type: none"> Adjust pixel frequency (CLOCK) and PHASE or press hot-key (AUTO).
Picture has color defects (white does not look white)	<ul style="list-style-type: none"> Adjust RGB color or select color temperature.
Poor brightness or contrast	<ul style="list-style-type: none"> When the brightness of the screen lowers after being used for a certain period and the function of the display is affected, send it to our authorized service center for repair.
Horizontal or vertical disturbances on the screen	<ul style="list-style-type: none"> Use win 95/98/2000/ME/XP shut-down mode Adjust CLOCK and PHASE or perform hot-key (AUTO-key).

CLOCK (pixel frequency) controls the number of pixels scanned by one horizontal sweep. If the frequency is not correct, the screen shows vertical stripes and the picture has not correct width.

PHASE adjusts the phase of the pixel clock signal. With a wrong phase adjustment the picture has horizontal disturbances in light picture.

For PHASE and CLOCK adjustment use “dot-pattern” or Win 95/98/2000/ME/XP shut-down mode pattern.

ERROR MESSAGE & POSSIBLE SOLUTION

NO SIGNAL

1. Check that the signal-cable is properly connected. If the connector is loose, tighten the connector's screws.
2. Check the signal-cable's connection pins for damage.

INPUT NOT SUPPORT

Your computer has been set to unsuitable display mode, set the computer to display mode given in the following table on page 21.

APPENDIX

SPECIFICATIONS

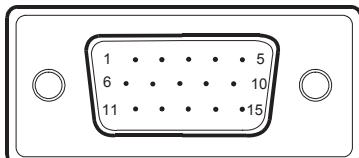
LCD Panel	Driving system	21.5" TFT Color LCD
	Size	54.7cm diagonal
	Pixel Pitch	0.2482mm(H) x 0.2482mm(V)
Input	Video	R, G, B Analog Interface
		Digital
	Separate Sync.	H/V TTL
	H-Frequency	30kHz – 83kHz
	V-Frequency	50-76Hz
Display Colors	16.7M Colors	
Dot Clock	170MHz	
Max. Resolution	1920 x 1080@60Hz	
Plug & Play	VESA DDC2B™	
Power Consumption	ON Mode	≤ 18W
	Standby Mode	≤ 0.5W
	OFF Mode	≤ 0.5W
Input Connector	D-Sub 15pin, DVI-D	
Input Video Signal	Analog: 0.7Vp-p(standard), 75 OHM, Positive	
Maximum Screen Size	Horizontal: 476.64mm Vertical: 268.11mm	
Power Source	100-240VAC, 50/60Hz	
Environmental Considerations	Operating Temp: 0° to 40°C Operating Height: 0~3658m Storage Temp.: -20° to 60°C Operating Humidity: 15% to 90%	
Dimensions	509.6(W)x 522.5(H)x244.5(D)mm	
Weight (N.W.)	5.39kg	
External Controls	Switch	Power button
		MENU/ENTER
		+ / 4:3 or Wide
		- / ECO Mode
		Source / Auto / Exit
	Functions	Luminance
		Image Setup
		Color Temp
		OSD Setup
		Extra
Power Consumption (Max)	23 Watts	
Regulatory Compliance	cTUVus, FCC, CE, EPA6.0, ISO9241-307, TCO6.0, EPEAT Gold, INMETRO	

FACTORY PRESET TIMING TABLE

English

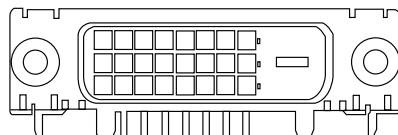
STANDARD	RESOLUTION	HORIZONTAL FREQUENCY (KHz)	VERTICAL FREQUENCY (Hz)
VGA	640x480@60Hz	31.469	59.940
	640x480@72Hz	37.861	72.809
	640x480@75Hz	37.500	75.00
SVGA	800x600@56Hz	35.156	56.250
	800x600@60Hz	37.879	60.317
	800x600@72Hz	48.077	72.188
	800x600@75Hz	46.875	75.000
XGA	1024x768@60Hz	48.363	60.004
	1024x768@70Hz	56.476	70.069
	1024x768@75Hz	60.023	75.029
SXGA	1280x1024@60Hz	63.981	60.020
	1280x1024@75Hz	79.976	75.025
WXGA+	1400x900@60Hz	55.935	59.887
	1400x900@60Hz	55.469	59.901
WSXGA	1680x1050@60Hz	65.290	59.954
	1680x1050@60Hz	64.674	59.883
HD	1920x1080@60HZ	67.500	60.000
	1280x960@60HZ	60.000	60.000
DOS	720x400@70Hz	31.469	70.087
VGA	640x480@67Hz	35.000	66.667
SVGA	832x624@75Hz	49.725	74.551
XGA	1024x768@75Hz	60.241	74.927

CONNECTOR PIN ASSIGNMENT



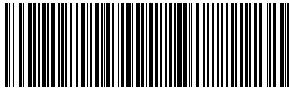
15 - Pin Color Display Signal Cable

PIN NO.	DESCRIPTION	PIN NO.	DESCRIPTION
1.	Red	9.	+5V
2.	Green	10.	Ground
3.	Blue	11.	Ground
4.	Ground	12.	DDC-Serial Data
5.	Detect Cable	13.	H-Sync
6.	R-Ground	14.	V-Sync
7.	G-Ground	15.	DDC-Serial Clock
8.	B-Ground		



24-pin color display signal cable

PIN No.	Description	PIN No.	Description
1.	TMDS data 2-	13.	NC
2.	TMDS data 2+	14.	+5V power
3.	TMDS data 2/4 shield	15.	GND (return for +5V hsync.vsync)
4.	NC	16.	Hot-plug detection
5.	NC	17.	TMDS data 0-
6.	DDC clock	18.	TMDS data 0+
7.	DDC data	19.	TMDS data 0/5 shield
8.	NC	20.	NC
9.	TMDS data 1-	21.	NC
10.	TMDS data 1+	22.	TMDS clock shield
11.	TMDS data 1/3 shield	23.	TMDS clock+
12.	NC	24.	DDCTMDS clock-



Q41G22M161505A

COMPONENT SPECIFICATION

CUSTOMER PART NO.		PART NO		PART DESCRIPTION	
Q41G22M1-615-05A		Q41G22M1-615-05A		说明书	
CUSTOMER		TPV SUPPLIER CODE		FACTORY	
福建捷联电子有限公司		3603602		大嘉美印刷（厦门）有限公司	
Safety Controlled Marking		<input type="checkbox"/> YES <input type="checkbox"/> NO	<input type="checkbox"/> 1st source <input type="checkbox"/> 2nd source	First Source Vendor	
CCC	<input type="checkbox"/> YES <input type="checkbox"/> NO	CQC	<input type="checkbox"/> YES <input type="checkbox"/> NO	Classify Code	
Verify Model		Verify Location		Tracking Code	
NOTE: 来料外包装及小包装标示 RoHS 印章 具体印刷内容，尺寸，规格，物理性能等按照 TPV 提供的规格书制作;					
NOTICE : <ol style="list-style-type: none"> Any specification changed of component, especially following items: Raw Material, Process, Tooling, Factory, Label, halftone, and any engineering changed of production, should be approved by TPV Any engineering changed of component should be in version record, provide old version parts management information to TPV if required. All raw material of supplied parts should be meet the TPV standard RDEMS-01 's latest version, and the requirement of regional or country laws and ordinances. 					
ADD: 厦门市同安工业集中区思明园 15~16 号					
TEL: 0592-5654968		FAX: 0592-6033152			
E-mail: Dayang-xm@126.com		Website: 			
DESIGN: <u>刘艳平</u> CHECK: <u>杨景</u> APP: <u>蒲兴容</u>					

APPROVAL SHEET NO.	APPROVAL CONDITION	VERSION	RELEASED DATE
APR130802400	正式承认	A	2013-08-17
CUSTOMER APPROVED			
COMPONENT ENGINEER	林秀霖	ELECTRONIC PROJECT ENGINEER	
CHECKED BY	陈莉	MECHANICAL PROJECT ENGINEER	
APPROVER BY	林芳	CHECKED BY	
FINAL APPROVER BY	陈旭标		

CATALOG

1. SPEC
2. Component SPEC Version Record
3. 测试项目管控 LIST
4. 检验报告
5. 环境管理物质合格保证书
6. 原材料及原材料厂家调查表
7. ANNEX

COMPONENT SPEC VERSION RECORD

TPV PART NO.		Q41G22M1-615-05A	PART NO.	Q41G22M1-615-05A	
VER	MINUTE OF CHANGES			CHECK	RELEASE DATE
A	新料			杨景	2013-8-17

测试项目管控 LIST

备注：

所有来料包装适合运输，不脏污，不变形，确保来料符合 SPEC 及工程规格要求

厦门大嘉美印刷有限公司包材管理物质合格保证书

敝司保证敝司（包括敝司的子公司，联营公司，以下类同）直接或通过第3方单位向冠捷及其关联公司提供的包装或包装材料中所包含的所有物质符合冠捷环境管理物质标准（RDEMS-01 Ver. : A. 06. 1）第4节的规定，包括以下指定的物质：

物质	CAS No.	限值(ppm)	管制范围
镉、铅、汞、六价铬	--	四项总和 100	所有包装及包材
甲醛	50-00-0	0.05	栈板:硬木复合板-单板芯或复合芯
		0.09	栈板:刨花板
		0.11	栈板:中密度纤维板
		0.13	栈板:薄型中密度纤维板
		0.1ppm 0.124mg/m ³	栈板:于12m ³ , 1m ³ 或 0.00225m ³ 的气密试验槽中，释放的甲醛含量
		0.1	黏合剂、油墨、涂料、胶带
苯	71-43-2	1	所有包装及包材
甲苯	108-88-3	40	所有包装及包材
挥发性有机物(VOC)	--	所有 VOC 总和: 100	所有包装及包材

签名 (Signature) : 杨景

职位 (Position) : 品管部经理

日期 (Date) : 2013-08-17

公章 (Cachet) :



Xiamen Dajiaomei Printing co., LTD. **Packaging Substances Guarantee Letter**

We (includes our subsidiary, affiliated company) here guarantee that all packaging and packaging materials shipped to TPV and affiliated companies (includes directly shipping or via third parties) are contained free of those prohibited materials which listed on TPV standard (RDEMS-01 Ver.: A.06.1), section 4:

Substances	CAS No.	Available concentration (ppm)	Application
Cadmium, Lead, Mercury, Hexavalent Chromium	--	Sum of four substances: 100	All packaging and packaging materials
Formaldehyde	50-00-0	0.05	Pallet: HWVV-VC or HWVV-CC
		0.09	Pallet: PB
		0.11	Pallet: MDF
		0.13	Pallet: TMDF
		0.1ppm 0.124mg/m ³	Pallet: Release formaldehyde content in 12m ³ , 1m ³ or 0.00225m ³ air-locked chamber
		0.1	Adhesive, ink, paint, tape
Benzene	71-43-2	1	All packaging and packaging materials
Toluene	108-88-3	40	All packaging and packaging materials
Volatile Organic Compounds (VOC)	--	Sum of all VOC: 100	All packaging and packaging materials

Signature: Jing Yang

Position: QC. Manager

Date: 2013-08-13

Cachet: _____



厦门大嘉美印刷有限公司限制管理物质合格保证书

敝司保证敝司（包括敝司的子公司，联营公司，以下类同）直接或通过第3方单位向冠捷及其关联公司提供的制品或部品（附属物及其它随制品一起提供的所有物品）中所包含的所有物质符合冠捷环境管理物质标准（RDEMS-01 Ver.: A.07.0）第4节的规定，包括以下指定的物质：

物质	CAS No.	限值(ppm)	管制范围
镉及其化合物	7440-43-9	5	所有均质材料，豁免项目除外(豁免项目请参照RDEMS-01表Annex II)
铅及其化合物	7439-92-1	50	所有均质材料，豁免项目除外(豁免项目请参照RDEMS-01表Annex II)
汞及其化合物	7439-97-6	ND	所有均质材料，豁免项目除外(豁免项目请参照RDEMS-01表Annex II)
六价铬及其化合物	--	不得含有	金属
		100	除了上述项目外的其他均质材料(豁免项目请参照RDEMS-01表Annex II)
多溴联苯(PBB)，包含十溴联苯醚(DecaBDE)的多溴二苯醚，及其氧化物(PBDEs, PBBEs, PBBOs)	PBB: 59536-65-1	500	所有均质材料
四溴二苯醚/五溴二苯醚	40088-47-9/ 32534-81-9	不得含有	黏胶，胶水
铍及其化合物(含氧化铍)	BeO: 1304-56-9	不得有意添加	所有均质材料
镁及其化合物	7439-95-4	1000	所有均质材料
砷及其化合物(含五氧化二砷，三氧化二砷)	As ₂ O ₅ :	10	Panel中用到的玻璃
	1303-28-2 As ₂ O ₃ : 1327-53-3	100	除了上述项目外的其他均质材料
锑及其化合物	7440-36-0	1000	所有均质材料
镍及其化合物	7440-02-0	0.5 μg/cm ² /周	仅限于直接与皮肤有长期接触(>30秒)的物品表面处理应用
铋及其化合物	7440-69-9	1000	所有均质材料
硒及其化合物	7782-49-2	1000	所有均质材料
二氯化钴	7646-79-9	不得有意添加	用于干燥剂(硅胶等)中的湿度指示剂
石棉	--	不得含有	所有均质材料
臭氧层破坏物质(ODS)	--	不得含有	所有均质材料
氟化温室气体(SF ₆ , PFCs, HFCs)	--	不得含有	所有均质材料
全氟辛烷磺酸(PFOA)及其酯化物(PFOS)	PFOA: 1723-23-1	1μg/m ²	涂层材料
		1000	除了上述项目外的其他均质材料
多氯化戴奥辛及呋喃(PCDDs & PCDFs)	--	不得含有	所有均质材料
六氯环己烷(HCH)	608-73-1	不得含有	所有均质材料
多氯联苯(PCB)	1336-36-3	不得含有	所有均质材料
多氯三联苯(PCT)	61788-33-8	不得含有	所有均质材料
多氯化萘(PCN)	70776-03-3	不得含有	所有均质材料
短链氯化石蜡(C10-C13 SCCP)	85535-84-8	不得含有	所有均质材料
中链氯化石蜡 MCCP	85535-85-9	不得有意添加	所有均质材料
五氯苯酚(PCP)及其盐类与酯类	87-86-5	不得有意添加	所有均质材料
单甲基二氯二苯甲烷(Ugilec 121或Ugilec 21)	--	不得含有	所有均质材料

单甲基四氯乙烷甲烷 (Ugilec 141)	76253-60-6	不得含有	所有均质材料
单甲基二溴二苯基甲烷 (DBBT)	99688-47-8	不得含有	所有均质材料
六溴环十二烷(HBCDD)及其主要光学异构物	25637-99-4 3194-55-6 134237-50-6 134237-51-7 134237-52-8	1000	所有均质材料
四溴双酚A(TBBPA)	79-94-7	1000	除了印刷电路板、IC封装本体、线材与连接器以外的所有均质材料
多溴化戴奥辛及呋喃(PBDDs & PBDFs)	--	不得含有	所有均质材料
特定偶氮化合物	--	30	会与人体接触的所有均质材料
三丁基锡(TBT)、三苯基锡(TPT)、氧化三丁锡 (TBTO)	TBTO: 56-35-9	不得含有	所有均质材料
二丁基锡(DBT)、二辛基锡(DOT)化合物	DBTO: 818-08-6 DOTO: 870-08-6	不得含有	所有均质材料
壬基酚与壬基酚聚氧乙烯醚及相关物质 (NP/NPEs)	--	不得含有	所有均质材料
辛基酚(OP)	--	不得含有	所有均质材料
富马酸二甲酯(DMF)	624-49-7	0.1	所有均质材料
特定邻苯二甲酸盐	--	1000	所有均质材料
多环芳香烃(PAHs)	--	不得含有	所有均质材料
挥发性有机物(VOCs)	--	1000	黏合剂、涂料
双酚A(Bisphenol A)	80-05-7	25	塑料
麝香类物质(二甲苯麝香及酮麝香)	Musk xylene: 81-15-2	500	所有均质材料
4,4'-二氨基二苯基甲烷 (MDA)	101-77-9	1000	所有均质材料
2-(2'-羟基-3',5'-二叔丁基苯基)-苯并三唑	3846-71-7	不得有意添加	用于塑料中作为紫外线防护剂、紫外线吸收剂的用途
氨基-/硝基-苯/联苯/有机物	--	不得有意添加	所有均质材料
对二氨基联苯及其盐类	--	不得含有	所有均质材料
红磷, 黄磷	7723-14-0	不得有意添加	所有均质材料
六氯乙烷	67-72-1	禁止	非铁金属的制造与加工
三氯生	3380-34-5	10	所有均质材料
表面活性剂(DTDMAC/DODMAC/DHTDMAC)	DTDMAC: 68783-78-8 DODMAC: 107-64-2 DHTDMAC: 61789-80-8	总和1000	清洗剂
磷酸三(2-氯乙基)酯(TCEP)	115-96-8	1000	用于塑料、树脂、纤维、布料的难燃剂用途
放射性物质	--	不得含有	所有均质材料

签名 (Signature) : 杨景

职位 (Position) : 品管部经理

日期 (Date) : 2013-08-13

公章 (Cachet) : 厦门大嘉电子有限公司

品管部专用章

Xiamen Dajamei Printing co., LTD. Restricted Substances Guarantee Letter

We (includes our subsidiary, affiliated company) here guarantee that all the products and parts (attachment, all parts with the product) shipped to TPV and affiliated companies (includes directly shipping or via third parties) are contained free of those prohibited materials which listed on TPV standard (RDEMS-01 Ver.: A.07.0), section 4:

Substances	CAS No.	Available concentration (ppm)	Application
Cadmium (Cd) & Cadmium compounds	7440-43-9	5	All homogeneous materials except exemptions listed in RDEMS-01 Annex II
Lead (Pb) & Lead compounds	7439-92-1	50	All homogeneous materials except exemptions listed in RDEMS-01 Annex II
Mercury (Hg) & Mercury compounds	7439-97-6	ND	All homogeneous materials except exemptions listed in RDEMS-01 Annex II
Hexavalent Chromium (Cr(VI))& its compounds	--	Not contained	Metal materials
		100	Without metal materials, all homogeneous materials except exemptions listed in RDEMS-01 Annex II
Polybrominated Biphenyls (PBBs), Polybrominated Diphenyl Ethers (PBDEs) (include DecaBDE), and its oxides (PBB0s)	PBB: 59536-65-1	500	All homogeneous materials
Tetrabromodiphenyl ether / Pentabromodiphenyl ether	40088-47-9/ 32534-81-9	Not contained	Adhesives
Beryllium and Beryllium Compounds (include Be0)	Be0: 1304-56-9	Not intentionally added	All homogeneous materials
Magnesium (Mg) and Magnesium compounds	7439-95-4	1000	All homogeneous materials
Arsenic (As) and Arsenic compounds (include Sb ₂ O ₅ , Sb ₂ O ₃)	As ₂ O ₅ : 1303-28-2 As ₂ O ₃ : 1327-53-3	10	All glasses used in panel
		100	All other homogeneous materials except mentioned above
Antimony (Sb) & Antimony compounds	7440-36-0	1000	All homogeneous materials
Nickel (Ni) & Nickel compounds	7440-02-0	0.5 µg/cm ² /week	All surface processing materials intended to come into direct and prolonged contact (>30 seconds) with the skin
Bismuth (Bi) & Bismuth compounds	7440-69-9	1000	All homogeneous materials
Selenium (Se) & Selenium compounds	7782-49-2	1000	All homogeneous materials
Cobalt dioxide	7646-79-9	Not intentionally added	Moisture indicator used for a desiccant agent (e.g. silica gel)
Asbestos	--	Not contained	All homogeneous materials

Ozone Depleting Substances (ODS)	--	Not contained	All homogeneous materials
Fluorinated Green House Gases (SF6, PFCs, HFCs)	--	Not contained	All homogeneous materials
Perfluoroctanoic acid (PFOA) and Perfluorooctane sulfonate (PFOS)	PFOA: 1723-23-1	1µg/m ²	All painting materials
		1000	All other homogeneous materials except mentioned above
PCDDs & PCDFs	--	Not contained	All homogeneous materials
Hexachlorocyclohexane (HCH)	608-73-1	Not contained	All homogeneous materials
Polychlorinated Biphenyls (PCB)	1336-36-3	Not contained	All homogeneous materials
Polychlorinated Terphenyls (PCT)	61788-33-8	Not contained	All homogeneous materials
Polychlorinated naphthalenes (PCN)	70776-03-3	Not contained	All homogeneous materials
Short-Chain Chlorinated Paraffins (C10-C13 SCCP)	85535-84-8	Not contained	All homogeneous materials
Medium-Chain Chlorinated Paraffins (MCCP)	85535-85-9	Not intentionally added	All homogeneous materials
Polychlorinated Phenols (PCP) and its salts & esters	87-86-5	Not intentionally added	All homogeneous materials
Ugilec 121 or Ugilec 21	--	Not contained	All homogeneous materials
Ugilec 141	76253-60-6	Not contained	All homogeneous materials
DBBT	99688-47-8	Not contained	All homogeneous materials
Hexabromocyclo dodecane (HBCDD) and all major diastereoisomers	25637-99-4 3194-55-6 134237-50-6 134237-51-7 134237-52-8	1000	All homogeneous materials
Tetrabromobisphenol A (TBBPA)	79-94-7	1000	All homogeneous materials except used in printed wired board, IC molded body, cables/wires and connectors
PBDDs & PBDFs	--	Not contained	All homogeneous materials
Specific Azo compounds	--	30	All materials intended to contact with skin
Tributyl Tin (TBT) & Triphenyl Tin (TPT) compounds, Tributyl Tin Oxide (TBT0)	TBT0: 56-35-9	Not contained	All homogeneous materials
Dibutyl Tin (DBT) & Dioctyl Tin (DOT) Compounds	DBT0: 818-08-6 DOT0: 870-08-6	Not contained	All homogeneous materials
Nonylphenol & Nonylphenol esters (NP/NPEs)	--	Not contained	All homogeneous materials
Octylphenol (OP)	--	Not contained	All homogeneous materials
Dimethyl Fumarate (DMF)	624-49-7	0.1	All homogeneous materials
Specific phthalates	--	1000	All homogeneous materials
Poly Aromatic Hydrocarbons (PAHs)	--	Not contained	All homogeneous materials
Volatile Organic Compounds (VOCs)	--	1000	Adhesive, paint
Bisphenol A	80-05-7	25	All plastic materials
Musk xylene & Musk ketone	Musk xylene: 81-15-2	500	All homogeneous materials
4,4'-Diaminodiphenylmethane	101-77-9	1000	All homogeneous materials

(MDA)			
Phenol,2-(2H-benzotriazol-2-yl)-4,6-bis(1,1-dimethylethyl)	3846-71-7	Not intentionally added	Ultraviolet protectants and ultraviolet absorbers applied to decorative laminate, developing papers, molded plastic parts, lenses and frames of eyeglasses
Aromatic amine/Nitro benzene compounds	--	Not intentionally added	All homogeneous materials
Benzidine and its salts	--	Not contained	All homogeneous materials
Red Phosphorus, Yellow Phosphorus	7723-14-0	Not intentionally added	All homogeneous materials
Hexachloroethane	67-72-1	Exhibition to use	Non-ferrous metal manufacturing and processing
Triclosan	3380-34-5	10	All homogeneous materials
DTDMAC/DODMAC/ DHTDMAC	DTDMAC: 68783-78-8 DODMAC: 107-64-2 DHTDMAC: 61789-80-8	Sum of total DTDMAC/ DODMAC/ DHTDMAC: 1000	Cleaning agent
Tris (2-chloroethyl) phosphate (TCEP)	115-96-8	1000	Flame retardants that used in plastic, resin, fibers, and textile
Radioactive compounds	--	Not contained	All homogeneous materials

Signature: Jing Yang

Position: QC. Manager

Date: 2013-08-13

Cachet:



品管部专用章

环境管理物质不使用证书
(原材料及原材料厂家 LIST)

向贵司销售的零部件及组件的使用材料、包装材料等中未使用 **TPV 要求 (FOLLOW RDEMS-01)** 的管理物质（禁止使用对象）及其用途，特此证明。
且：零部件及组件的使用在材料，由以下成分构成。特此报告。

1、零件料号：**Q41G22M1-615-05A**

以下清单所列原材料为本料件所使用到的所有料件

Q41G2 2M1-6 15-05A	说明书	Raw Material	Raw Material Supplier	Cd		Pb		Cr ⁶⁺		Hg		PBB/PBDE	
				含量 (ppm)	SGS/ITS 测试报 告号码	含量 (ppm)	SGS/ITS 测试报 告号码	含量 (ppm)	SGS/ITS 测试报 告号码	含量 (ppm)	SGS/ITS 测试报 告号码	含量 (ppm)	SGS/ITS 测试报 告号码
		双胶纸	晨鸣	ND	RLSDE00019 7720001CR1	ND	RLSDE000197 720001CR1	ND	RLSDE00019 7720001CR1	ND	RLSDE00019 7720001CR1	ND	RLSDE000197 720001CR1
		铁线	罗泾	ND	SHAEC12182 57002	ND	SHAEC12182 57002	ND	SHAEC12182 57002	ND	SHAEC12182 57002	ND	SHAEC12182 57002
		油墨黑	牡丹	ND	(6613)070-140 1	ND	(6613)070-140 1	ND	(6613)070-140 1	ND	(6613)070-14 01	ND	(6613)070-140 1

2、ICP 测试对象物质（塑料（含橡胶）涂料、油墨和线材料中的镉和铅）测试要求的 ICP 数据另附。ICP 测试对象物质的成分表或 MSDS 另附。

备注：请填写该类零部件用到的所有部件、原材料、辅助材料的详细信息。

必须详细、正确的填写部件、原材料、辅助材料的供应商名称、材料型号

主管/职位：杨景/品管部经理

公司全称：厦门大嘉美印刷有限公司

公司公章：厦门大嘉美印刷有限公司

品管部专用章

后面附带有毒有害物质检测报告(第三方)、等料件符合 **RoHS** 规定的相关资料，[供应商送样零件测试表]、制造流程图（含品质控制点）、《信赖性试验报告》



测试报告

No. SHAEC1218257002

日期: 2012年10月23日 第1页,共5页

上海罗泾拉丝有限公司

上海市宝山区沪太路新川沙路513号

以下测试之样品是由申请者所提供及确认 : BSD骑马装订线

SGS工作编号 : SP12-030378 - SH

主要成分 : 铁, 锌

料号 : Q195F

型号 : 26#/0.50mm

可覆盖型号 : 21#/0.75mm, 22#/0.70mm, 23#/0.65mm, 24#/0.60mm, 25#/0.55mm, 27#/0.45mm, 28#/0.40mm

样品接收日期 : 2012年10月19日

测试周期 : 2012年10月19日 - 2012年10月23日

测试要求 : 根据客户要求测试

测试方法 : 请参见下一页

测试结果 : 请参见下一页

结论 : 基于所送样品进行的测试, 镉、铅、汞、六价铬、多溴联苯(PBB)、多溴二苯醚(PBDE)的测试结果符合欧盟RoHS指令2002/95/EC的重订指令2011/65/EU附录II的限值要求

通标标准技术服务有限公司

授权签名

Fan Jingjie, JJ 范晶捷

批准签署人

本报告是编号为SHAEC1218257001 报告的中文版本。

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated, the results shown in this test report refer only to the sample(s) tested.



SGS-STS Standards Technical Services (Shanghai) Co.,Ltd
Testing Center

3rd Building, No.889 Yishan Road Xuhui District, Shanghai China 200233
中国·上海·徐汇区宜山路889号3号楼 邮编: 200233

t E&E (86-21) 61402553 f E&E (86-21) 64953679
HL: (86-21) 61402594 HL: (86-21) 54500353 e sgs.china@sgs.com
www.cn.sgs.com

测试报告

No. SHAEC1218257002

日期: 2012年10月23日 第2页,共5页

测试结果:

测试样品描述:

样品编号	SGS样品ID	描述
1	SHA12-182570.001	银色金属线

备注:

- (1) 1 mg/kg = 1 ppm = 0.0001%
- (2) MDL = 方法检测限
- (3) ND = 未检出 (< MDL)
- (4) "-" = 未规定

RoHS指令2011/65/EU

测试方法: 参考IEC 62321:2008:

- (1) 用ICP-OES测定镉的含量.
- (2) 用ICP-OES测定铅的含量.
- (3) 用ICP-OES测定汞的含量.
- (4) 用点测试法/紫外-可见分光光度计比色法测定六价铬的含量.
- (5) 用GC-MS测定PBBs(多溴联苯)和PBDEs(多溴二苯醚) 的含量.

测试项目	限值	单位	MDL	001
镉 (Cd)	100	mg/kg	2	ND
铅(Pb)	1000	mg/kg	2	ND
汞 (Hg)	1000	mg/kg	2	ND
六价铬(CrVI)	-	-	◇	阴性
多溴联苯之和(PBBs)	1000	mg/kg	-	ND
一溴联苯	-	mg/kg	5	ND
二溴联苯	-	mg/kg	5	ND
三溴联苯	-	mg/kg	5	ND
四溴联苯	-	mg/kg	5	ND
五溴联苯	-	mg/kg	5	ND
六溴联苯	-	mg/kg	5	ND
七溴联苯	-	mg/kg	5	ND
八溴联苯	-	mg/kg	5	ND
九溴联苯	-	mg/kg	5	ND
十溴联苯	-	mg/kg	5	ND
多溴二苯醚之和(PBDEs)	1000	mg/kg	-	ND
一溴二苯醚	-	mg/kg	5	ND

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.



SGS-STS Standards Technical Services (Shanghai) Co., Ltd.
Testing Center

3rd Building, No.889 Yishan Road Xuhui District, Shanghai China 200233
中国·上海·徐汇区宜山路889号3号楼 邮编: 200233

t E&E (86-21) 61402553 f E&E (86-21) 64953679
HL: (86-21) 61402594 HL: (86-21) 54500353

www.cn.sgs.com

e sgs.china@sgs.com

测试报告

No. SHAEC1218257002

日期: 2012年10月23日

第3页,共5页

<u>测试项目</u>	<u>限值</u>	<u>单位</u>	<u>MDL</u>	<u>001</u>
二溴二苯醚	-	mg/kg	5	ND
三溴二苯醚	-	mg/kg	5	ND
四溴二苯醚	-	mg/kg	5	ND
五溴二苯醚	-	mg/kg	5	ND
六溴二苯醚	-	mg/kg	5	ND
七溴二苯醚	-	mg/kg	5	ND
八溴二苯醚	-	mg/kg	5	ND
九溴二苯醚	-	mg/kg	5	ND
十溴二苯醚	-	mg/kg	5	ND

备注:

(1) 最大允许极限值引用自指令2011/65/EU附录II.

(2) ◇点测试法:

阴性=未检测到六价铬,阳性=检测到六价铬;

(当点测试结果为阴性或无法确定时,将采用沸水萃取法作进一步的结果验证.)

◇沸水萃取法:

阴性=未检测到六价铬

阳性=检测到六价铬; 表明50 cm²表面积的被测试样品的沸水萃取液中六价铬的浓度等于或大于0.02 mg/kg

针对金属表面的防腐涂层:由于未获知样品的存储条件和生产日期,样品的六价铬测试结果仅代表测试时样品的状态

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated, the results shown in this test report refer only to the sample(s) tested.



SGS-STS Standards Technical Services (Shanghai) Co., Ltd.
Testing Center

3rd Building, No.889 Yishan Road Xuhui District, Shanghai China 200233
中国·上海·徐汇区宜山路889号3号楼 邮编: 200233

t E&E (86-21) 61402553 f E&E (86-21) 64953679
HL: (86-21) 61402594 HL: (86-21) 54500353

www.cn.sgs.com
e sgs.china@sgs.com

测试报告

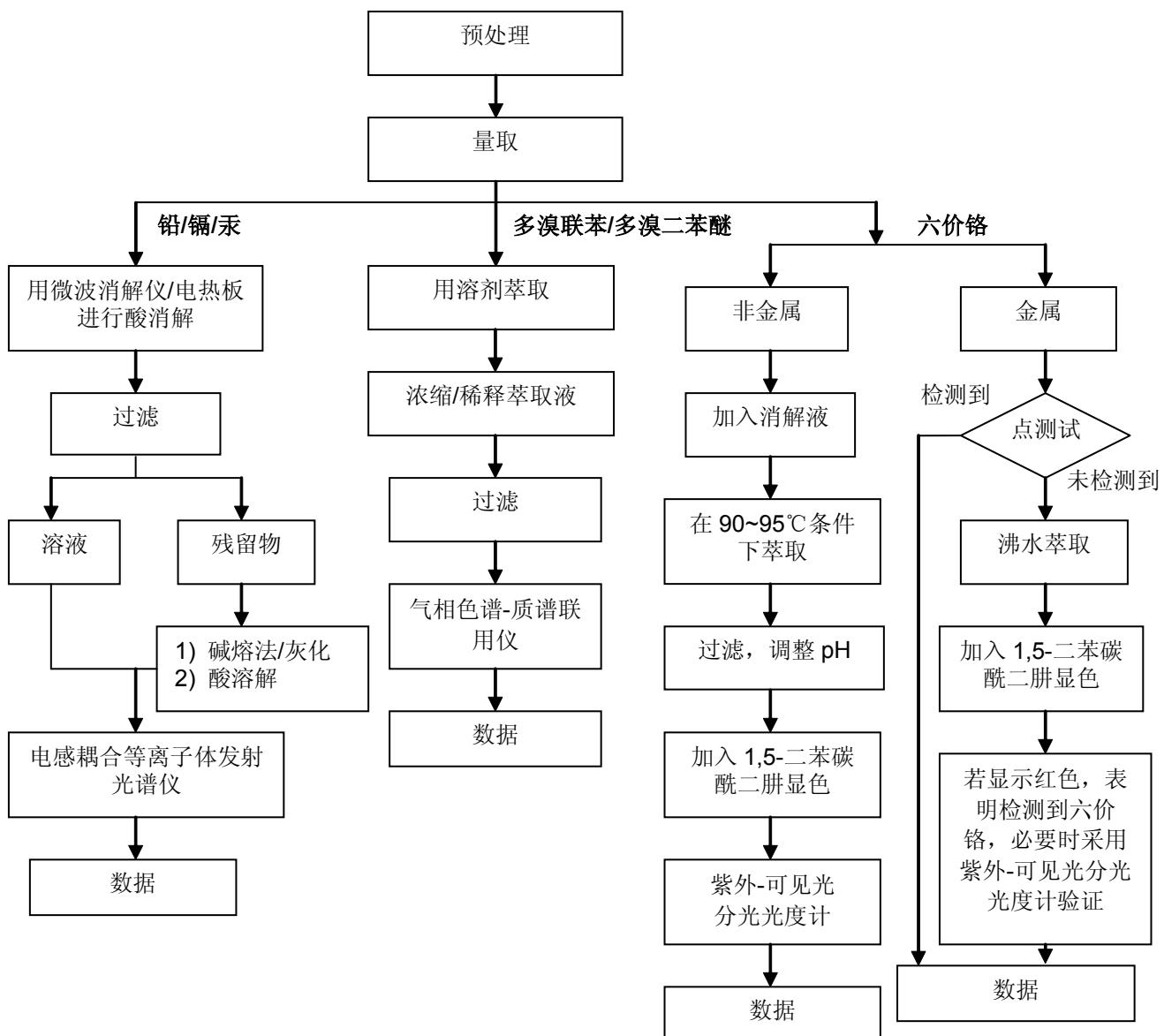
No. SHAEC1218257002

日期: 2012年10月23日 第4页,共5页

附件

RoHS 测试流程图

- 1) 分析人员: 施青/王彦青/肖飞/徐刚
- 2) 项目负责人: 张春华/徐亮/李丹
- 3) 样品按照下述流程被完全消解 (六价铬和多溴联苯/多溴二苯醚测试除外)。



This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/terms_and_conditions.htm, and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated, the results shown in this test report refer only to the sample(s) tested.



测试报告

No. SHAEC1218257002

日期: 2012年10月23日

第5页,共5页

样品照片:



此照片仅限于随SGS正本报告使用

*** 报告完 ***

This document is issued by the Company subject to its General Conditions of Service printed overleaf, available on request or accessible at http://www.sgs.com/terms_and_conditions.htm and, for electronic format documents, subject to Terms and Conditions for Electronic Documents at www.sgs.com/terms_e-document.htm. Attention is drawn to the limitation of liability, indemnification and jurisdiction issues defined therein. Any holder of this document is advised that information contained hereon reflects the Company's findings at the time of its intervention only and within the limits of Client's instructions, if any. The Company's sole responsibility is to its Client and this document does not exonerate parties to a transaction from exercising all their rights and obligations under the transaction documents. This document cannot be reproduced except in full, without prior written approval of the Company. Any unauthorized alteration, forgery or falsification of the content or appearance of this document is unlawful and offenders may be prosecuted to the fullest extent of the law. Unless otherwise stated, the results shown in this test report refer only to the sample(s) tested.



SGS-ESTC Standards Technical Services (Shanghai) Co.,Ltd.

Testing Center

3rd Building, No.889 Yishan Road Xuhui District, Shanghai China 200233
中国·上海·徐汇区宜山路889号3号楼 邮编: 200233t E&E (86-21) 61402553 f E&E (86-21) 64953679
HL: (86-21) 61402594 HL: (86-21) 54500353www.cn.sgs.com
e sgs.china@sgs.com

检测报告

报告编号 RLSDE000197720001CR1

第 1 页 共 4 页

申请单位 湛江晨鸣浆纸有限公司

地址 广东省湛江市麻章区太平镇湛江晨鸣浆纸有限公司

以下测试之样品及样品信息由申请者提供并确认

样品名称 高档全木浆双面胶版印刷纸

样品接收日期 2012. 12. 24

样品检测日期 2012. 12. 24—2012. 12. 27

检测要求 根据客户要求, 对所提交样品中的铅(Pb), 镉(Cd), 汞(Hg), 六价铬(Cr(VI)), 多溴联苯(PBBS), 多溴二苯醚(PBDEs)进行测试。

检测依据

测试项目	测试方法	测试仪器	方法检测限
铅(Pb)	IEC 62321: 2008 Ed. 1 Sec. 10	ICP-OES	2 mg/kg
镉(Cd)	IEC 62321: 2008 Ed. 1 Sec. 10	ICP-OES	2 mg/kg
汞(Hg)	IEC 62321: 2008 Ed. 1 Sec. 7	ICP-OES	2 mg/kg
六价铬(Cr(VI))	IEC 62321: 2008 Ed. 1 Annex C	UV-Vis	2 mg/kg
多溴联苯(PBBS)	IEC 62321: 2008 Ed. 1 Annex A	GC-MS	5 mg/kg
多溴二苯醚(PBDEs)	IEC 62321: 2008 Ed. 1 Annex A	GC-MS	5 mg/kg

检测结果

请参见下页。

主 检
批 准

冯庆叶
万庆红
报告专用章

万庆红
技术经理

审 核
日 期

王文革

2013. 01. 30

No. 11449684

深圳市华测检测技术股份有限公司顺德分公司 广东省佛山市顺德区容桂容奇大道东8号之二永盈大厦9楼

检测报告

报告编号 RLSDE000197720001CR1

第 2 页 共 4 页

检测结果

测试项目	结果
铅(Pb)	N. D.
镉(Cd)	N. D.
汞(Hg)	N. D.
六价铬(Cr(VI))	N. D.
测试项目	结果
多溴联苯(PBBs)	
一溴联苯	N. D.
二溴联苯	N. D.
三溴联苯	N. D.
四溴联苯	N. D.
五溴联苯	N. D.
六溴联苯	N. D.
七溴联苯	N. D.
八溴联苯	N. D.
九溴联苯	N. D.
十溴联苯	N. D.
测试项目	结果
多溴二苯醚(PBDEs)	
一溴二苯醚	N. D.
二溴二苯醚	N. D.
三溴二苯醚	N. D.
四溴二苯醚	N. D.
五溴二苯醚	N. D.
六溴二苯醚	N. D.
七溴二苯醚	N. D.
八溴二苯醚	N. D.
九溴二苯醚	N. D.
十溴二苯醚	N. D.

测试样品/部位描述 白色纸

注释: -对于检测铅, 汞, 镉之样品已完全溶解。

-N.D. = 未检出 (小于方法检测限)

-mg/kg = ppm = 百万分之几

备注: 1. 本报告替换报告RLSDE000197720001C, 报告RLSDE000197720001C作废。

本报告编号末尾中R1表示本次修改后的报告版本。

2. 报告编号中“C”表示此报告为中文版本。

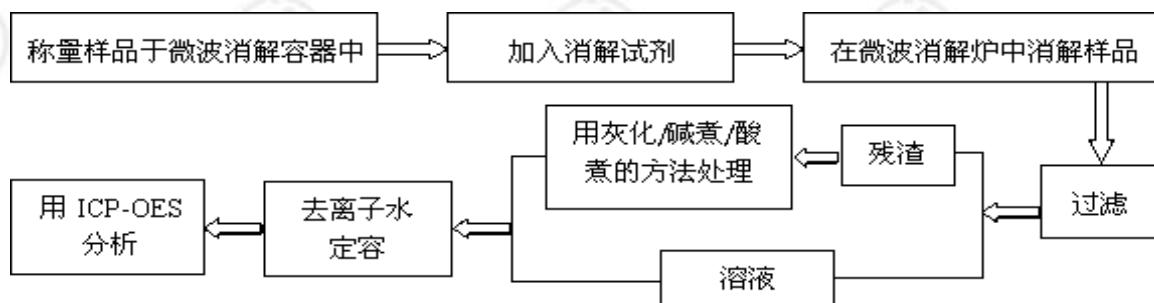
检测报告

报告编号 RLSDE000197720001CR1

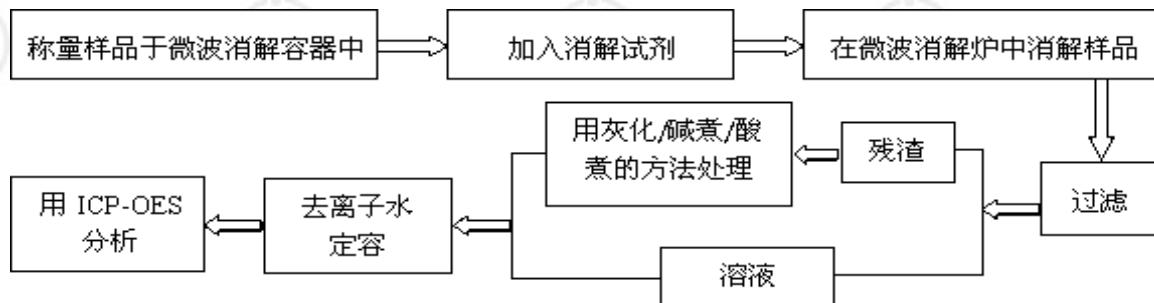
第 3 页 共 4 页

检测流程

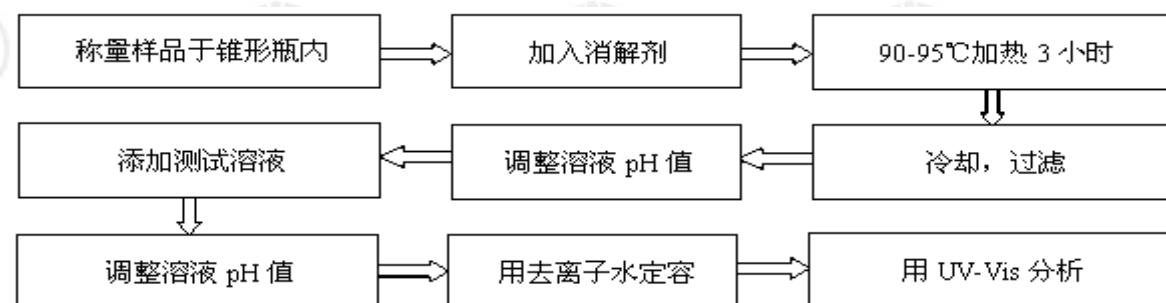
1. 铅(Pb), 镉(Cd)



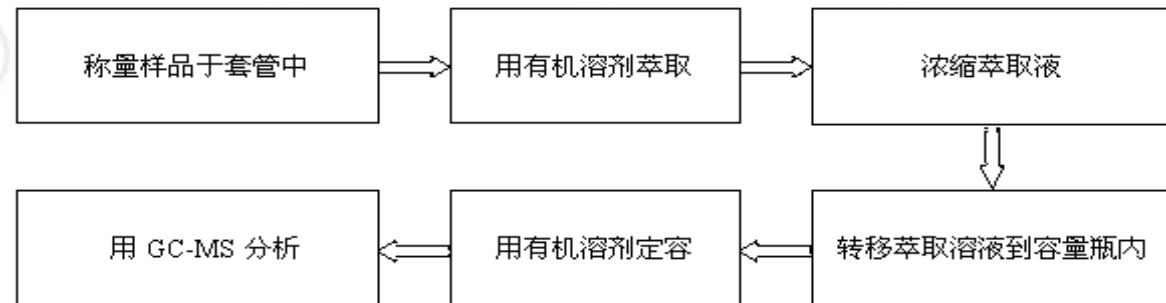
2. 汞(Hg)



3. 六价铬(Cr(VI))



4. 多溴联苯(PBBs), 多溴二苯醚(PBDEs)

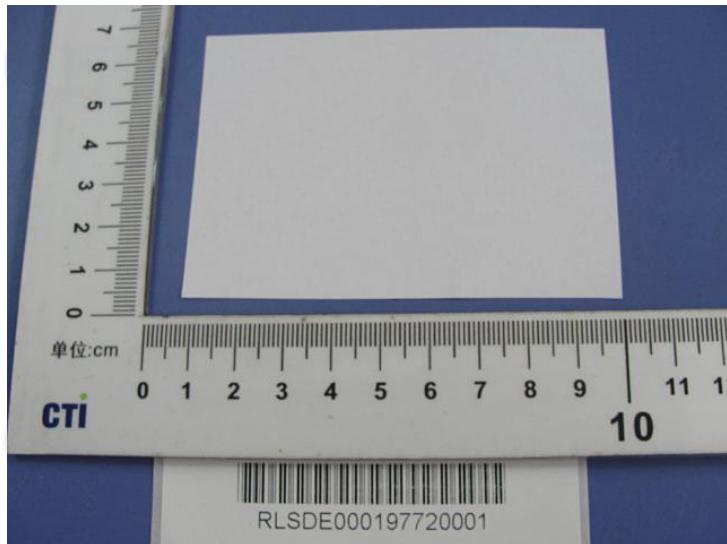


检测报告

报告编号 RLSDE000197720001CR1

第 4 页 共 4 页

样品图片



报告结束

检测报告无批准人签字及“报告专用章”无效，本报告检测结果仅对受测样品负责。未经CTI书面同意，不得部分复制本报告。



BUREAU
VERITAS



2012090812C

TEST REPORT

LAB NO. : (6613)070-1401
DATE : March 15, 2013
PAGE : 1 OF 9

APPLICANT	: SHANGHAI PEONY PRINTING INK CO.,LTD 1340, GU LANG ROAD SHANGHAI CHINA
申请人公司名称	: 上海牡丹油墨有限公司 中国上海古浪路 1340 号
DATE OF SUBMISSION	: March 11, 2013
样品收取日期	: 2013 年 3 月 11 日
TEST PERIOD	: March 11, 2013 to March 15, 2013
所需工作周期	: 2013 年 3 月 11 日至 2013 年 3 月 15 日
NO. OF WORKING DAY(S)	: 5
所需工作日	: 5
SAMPLE DESCRIPTION	: One (1) received sample stated to be 05 快干亮光胶版油墨 (混合) Quick setting & high gloss offset printing ink (Mixture) Style No.: 05-03/04/06/08/09/14/15/18/19/20/24/25/27/28/29/30/31/32/36/37/38/39/ 40/52/53/60/93
TESTED ITEM 1 测试项目 1	: Black paste

SUMMARY OF TEST RESULTS 测试结果摘要

TEST REQUESTED 测试要求	CONCLUSION 结论	REMARK 备注
Phthalate Test 邻苯二甲酸盐测试	-	See results in page 3 结果见第 3 页
Migration of Certain Elements - EN 71-3: 1994 with Amendment A1:2000 and AC:2002 EN 71 PART 3-特定元素的迁移	-	See results in page 4 结果见第 4 页
European Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS) 有关欧盟委员会针对电子产品的指令(电子电器禁用某些有害物质指令), 2011/65/EU	PASS 通过	-

REMARK/备注

If there are questions or concerns on this report, please contact the following persons:

若有任何疑问或咨询, 可通过下述联络方式与我们联络

General enquiry and invoicing

许祥晖 小姐 Ms. Lucy Xu

其他问题

(021) 24166888*6842

Lucy.xu @cn.bureauveritas.com

Technical enquiry

余克刚/郭晔轩 先生 Mr. Gorden.Yu/ Kevin Guo

技术问题

(021) 24166888*6860/6856

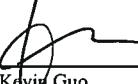
Gorden.Yu@cn.bureauveritas.com/ Kevin.guo@cn.bureauveritas.com

BUREAU VERITAS

CONSUMER PRODUCTS SERVICES DIVISION (SHANGHAI)

必维国际检验集团 - 必维申美商品检测(上海)有限公司

PREPARED BY : _____ Eunice
制定:


郭晔轩 Kevin Guo

电子电器分析部实验室经理

Electrical & Electronic Analytical LABORATORY MANAGER



BUREAU
VERITAS

LAB NO. : (6613)070-1401
DATE : March 15, 2013
PAGE : 2 OF 9

Photo of the Submitted Sample
所提交样品的照片





LAB NO. : (6613)070-1401
DATE : March 15, 2013
PAGE : 3 OF 9

TEST RESULT 测试结果

I.Phthalate Test

I.邻苯二甲酸盐测试

Phthalate 邻苯二甲酸盐	CAS No.	Testing item (%) 测试项目(%)	Laboratory reporting limit (%) 实验室报告界限(%)
		1	
Dibutyl phthalate (DBP) 邻苯二甲酸二丁酯	84-74-2	ND	0.005
Butyl benzyl phthalate (BBP) 邻苯二甲酸丁基苄基酯	85-68-7	ND	0.005
Di-2-ethylhexyl phthalate (DEHP) 邻苯二甲酸二(2-乙基己基)酯	117-81-7	ND	0.005
Di-n-octyl phthalate (DNOP) 邻苯二甲酸二辛酯	117-84-0	ND	0.005
Di-iso-decyl phthalate (DIDP) 邻苯二甲酸二异癸酯	26761-40-0	ND	0.005
Di-iso-nonyl phthalate (DINP) 邻苯二甲酸二异壬酯	28553-12-0	ND	0.005

Tested Item 1 测试项目 1: Black paste

Note: ND = Not detected (Concentration below 0.005%)

注释: ND = 未检出 (含量小于 0.005%)

Results reported in percentage 报告结果采用百分比

Method: Extraction with solvent, analysed by Gas Chromatography Mass Spectrometer.

方法: 用溶液萃取样品，并用气相色谱-质谱联用仪分析。



LAB NO. : (6613)070-1401
DATE : March 15, 2013
PAGE : 4 OF 9

TEST RESULT 测试结果

II.Migration of Certain Elements - EN 71-3: 1994 with Amendment A1:2000 and AC:2002

II.EN 71 PART 3 特定元素的迁移

Parameter	Unit	Result	
		1	
Soluble Arsenic (As)	mg/kg	< 2.5	
Soluble Barium (Ba)	mg/kg	12.9	
Soluble Cadmium (Cd)	mg/kg	< 5	
Soluble Chromium (Cr)	mg/kg	< 5	
Soluble Mercury (Hg)	mg/kg	< 5	
Soluble Lead (Pb)	mg/kg	< 5	
Soluble Antimony (Sb)	mg/kg	< 5	
Soluble Selenium (Se)	mg/kg	< 5	
Conclusion	-	PASS	

Test Item	Description	Mass of Trace Amount (g)
Material Classification: Paints, varnishes lacquers, glazing powders and similar materials in solid or in liquid form		
1	Black paste	NA

Note: < = Less than

mg/kg = milligram per kilogram

g = gram

NA = Not applicable

Method: EN 71-3: 1994 with amendment A1: 2000 and AC: 2002. The heavy metals content was determined by Inductively Coupled Argon Plasma Spectrophotometer.

Remark: 1. Limit and Analytical Correction

Element		As	Ba	Cd	Cr	Hg	Pb	Sb	Se
Maximum allowable limit (mg/kg)	All materials except modelling clay	25	1000	75	60	60	90	60	500
	Modelling clay	25	250	50	25	25	90	60	500
Analytical correction (%)		60	30	30	30	50	30	60	60

2. ^cThe reported results are adjusted analytical results with the analytical correction shown in Remark 1.
3. The received sample(s) contained component(s) of less than 10mg on one single sample, therefore such component(s) was not tested for migration of certain elements as specified in clause 7 of this standard.



LAB NO. : (6613)070-1401
DATE : March 15, 2013
PAGE : 5 OF 9

TEST RESULT 测试结果

III. European Council Directive 2011/65/EU on the Restriction of the Use of Certain Hazardous Substances in Electrical and Electronic Equipment (RoHS)

III. 有关欧盟委员会针对电子产品的指令(电子电器禁用某些有害物质指令), 2011/65/EU

Test Method 测试方法 : See Appendix. 见附录。

Test Item 测试项目	Description 描述		
1	Black paste		

-	Unit 单位	Maximum Allowable Limit (Req.) 最大允许限值 (要求)	Result 结果
Test Item 测试项目	-	-	1
Parameter 参数	-	-	-
Lead (Pb) 铅	mg/kg	1000	ND
Cadmium (Cd) 镉	mg/kg	100	ND
Mercury (Hg) 汞	mg/kg	1000	ND
Chromium VI (Cr VI) 六价铬	mg/kg	1000	ND
MonoBB 一溴联苯	mg/kg		ND
DiBB 二溴联苯	mg/kg		ND
TriBB 三溴联苯	mg/kg		ND
TetraBB 四溴联苯	mg/kg		ND
PentaBB 五溴联苯	mg/kg		ND
HexaBB 六溴联苯	mg/kg		ND
HeptaBB 七溴联苯	mg/kg		ND
OctaBB 八溴联苯	mg/kg		ND
NonaBB 九溴联苯	mg/kg		ND
DecaBB 十溴联苯	mg/kg		ND
Sum of PBBs 多溴联苯总和	mg/kg	1000	ND
MonoBDE 一溴联苯醚	mg/kg		ND
DiBDE 二溴联苯醚	mg/kg		ND
TriBDE 三溴联苯醚	mg/kg		ND
TetraBDE 四溴联苯醚	mg/kg		ND
PentaBDE 五溴联苯醚	mg/kg		ND
HexaBDE 六溴联苯醚	mg/kg		ND
HeptaBDE 七溴联苯醚	mg/kg		ND
OctaBDE 八溴联苯醚	mg/kg		ND
NonaBDE 九溴联苯醚	mg/kg		ND
DecaBDE 十溴联苯醚	mg/kg		ND
Sum of PBDEs 多溴联苯醚总和	mg/kg	1000	ND
Conclusion 结论	-	-	PASS 通过



LAB NO. : (6613)070-1401
DATE : March 15, 2013
PAGE : 6 OF 9

Note / Key 注释:

ND = Not detected 未检出 “>” = Greater than 大于

mg/kg = milligram(s) per kilogram 毫克每千克

Req. = Requirement 要求

EX = Exempted 豁免

Detection Limit 检出限(mg/kg) :

Each (Pb, Cd, Hg & Cr VI) 2 各 (铅, 镉, 汞和六价铬) 2;

Each PBBs 50; Each PBDEs 50 各多溴联苯 50; 各多溴联苯醚 50

Remark 备注:

- The list of analytes is summarized in table of Appendix. 分析物列表 – 见附录。
- The test flowchart of heavy metals and flame retardants content is listed in table of Appendix. 重金属和阻燃剂含量的测试流程图 – 见附录
- Result(s) of Cr VI for metallic material(s) was (were) expressed in term of positive and negative. Negative means the absence of Cr VI on the tested areas and the result(s) was (were) regarded as in compliance with European Council Directive 2011/65/EU, Article 4(1). While, positive means the presence of Cr VI on tested areas and the result(s) was (were) regarded as in conflict with European Council Directive 2011/65/EU, Article 4(1).
金属材料的六价铬结果以阴性和阳性表示。阴性表示六价铬未被检出在测试表面，即结果被认为符合 2011/65/EU 指令中，条款 4(1) 的要求。而阳性则表示六价铬存在在测试表面，即不符合 2011/65/EU 指令中，条款 4(1) 的要求。
- According to European Council Directive 2011/65/EU, Article 5 “Adaptation of the Annexes to scientific and technical progress”, exemption(s) should be granted to the materials and components of Test Item(s) in the lists in Annexes III and IV of this directive.
根据欧盟委员会 2011/65/EU 指令中，条款 5“适应科学技术进步的附件”，附件 III 和 IV 中列明的测试项目中的材料和部件可予以豁免。

END



LAB NO. : (6613)070-1401
 DATE : March 15, 2013
 PAGE : 7 OF 9

APPENDIX 附录

List of Analytes and their Corresponding Test Methods [European Council Directive 2011/65/EU] : 分析物名单及其相应的测试方法 [欧盟委员会指令 2011/65/EU] :

No.	Name of Analytes 分析物名称	Test Method(s) 测试方法
1	Lead (Pb) 铅	With reference to EN 62321: 2009, Clauses 8, 9 and 10. 参照 EN 62321: 2009, Clauses 8, 9 and 10.
2	Cadmium (Cd) 镉	With reference to EN 62321: 2009, Clause 7. 参照 EN 62321: 2009, Clause 7.
3	Mercury (Hg) 汞	With reference to EN 62321: 2009, Clause 7. 参照 EN 62321: 2009, Clause 7.
4	Chromium VI (Cr VI) 六价铬	<u>Metal 金属:</u> With reference to EN 62321: 2009, Annex B ^[a] . 参照 EN 62321: 2009, Annex B ^[a] . <u>Polymers & Electronics 聚合物及电子:</u> With reference to EN 62321: 2009, Annex C. 参照 EN 62321: 2009, Annex C.
5	Polybromobiphenyls (PBBs) 多溴联苯 - Bromobiphenyl (MonoBB) - Dibromobiphenyl (DiBB) - Tribromobiphenyl (TriBB) - Tetrabromobiphenyl (TetraBB) - Pentabromobiphenyl (PentaBB) - Hexabromobiphenyl (HexaBB) - Heptabromobiphenyl (HeptaBB) - Octabromobiphenyl (OctaBB) - Nonabromobiphenyl (NonaBB) - Decabromobiphenyl (DecaBB)	With reference to EN 62321: 2009, Annex A. 参照 EN 62321: 2009, Annex A.
6	Polybromodiphenyl ethers (PBDEs) 多溴联苯醚 - Bromodiphenyl ether (MonoBDE) - Dibromodiphenyl ether (DiBDE) - Tribromodiphenyl ether (TriBDE) - Tetrabromodiphenyl ether (TetraBDE) - Pentabromodiphenyl ether (PentaBDE) - Hexabromodiphenyl ether (HexaBDE) - Heptabromodiphenyl ether (HeptaBDE) - Octabromodiphenyl ether (OctaBDE) - Nonabromodiphenyl ether (NonaBDE) - Decabromodiphenyl ether (DecaBDE)	With reference to EN 62321: 2009, Annex A. 参照 EN 62321: 2009, Annex A.
<p>The principle of this method was evaluated and supported by two studies organized by IEC TC 111 WG3. These studies were focused on detecting the presence of Cr VI in the corrosion protection coatings on metallic samples. ^[a] 该方法的原理是在由 IEC TC111 WG3 组织的两次研究中得到了充分评估并获得了认可。这些研究侧重于对金属样品上防腐涂层中六价铬的存在的检测(定性测试)。</p>		

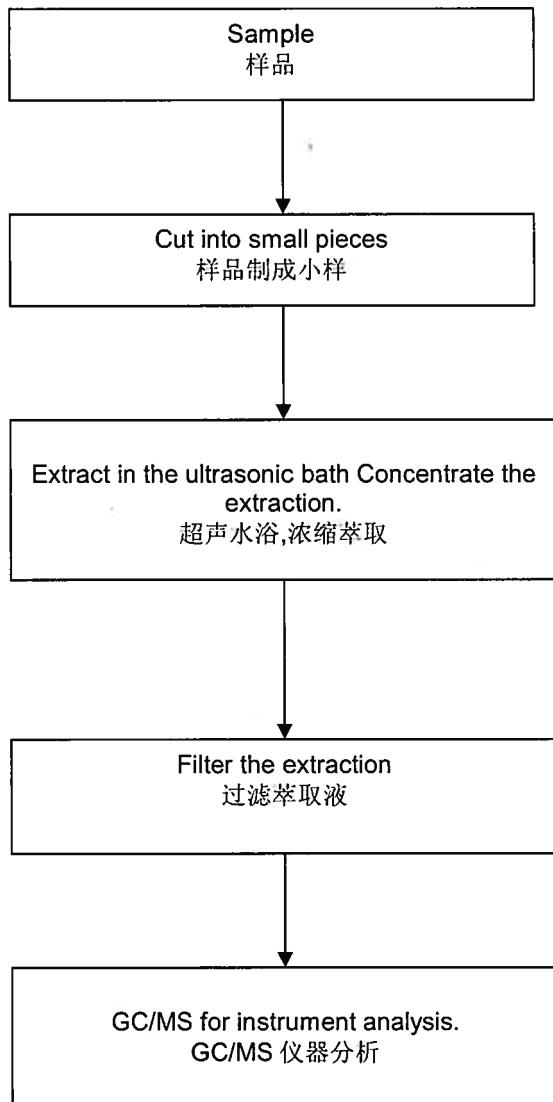


BUREAU
VERITAS

LAB NO. : (6613)070-1401
DATE : March 15, 2013
PAGE : 8 OF 9

APPENDIX 附录

Test Procedures Flow Chart for the determination of Phthalates

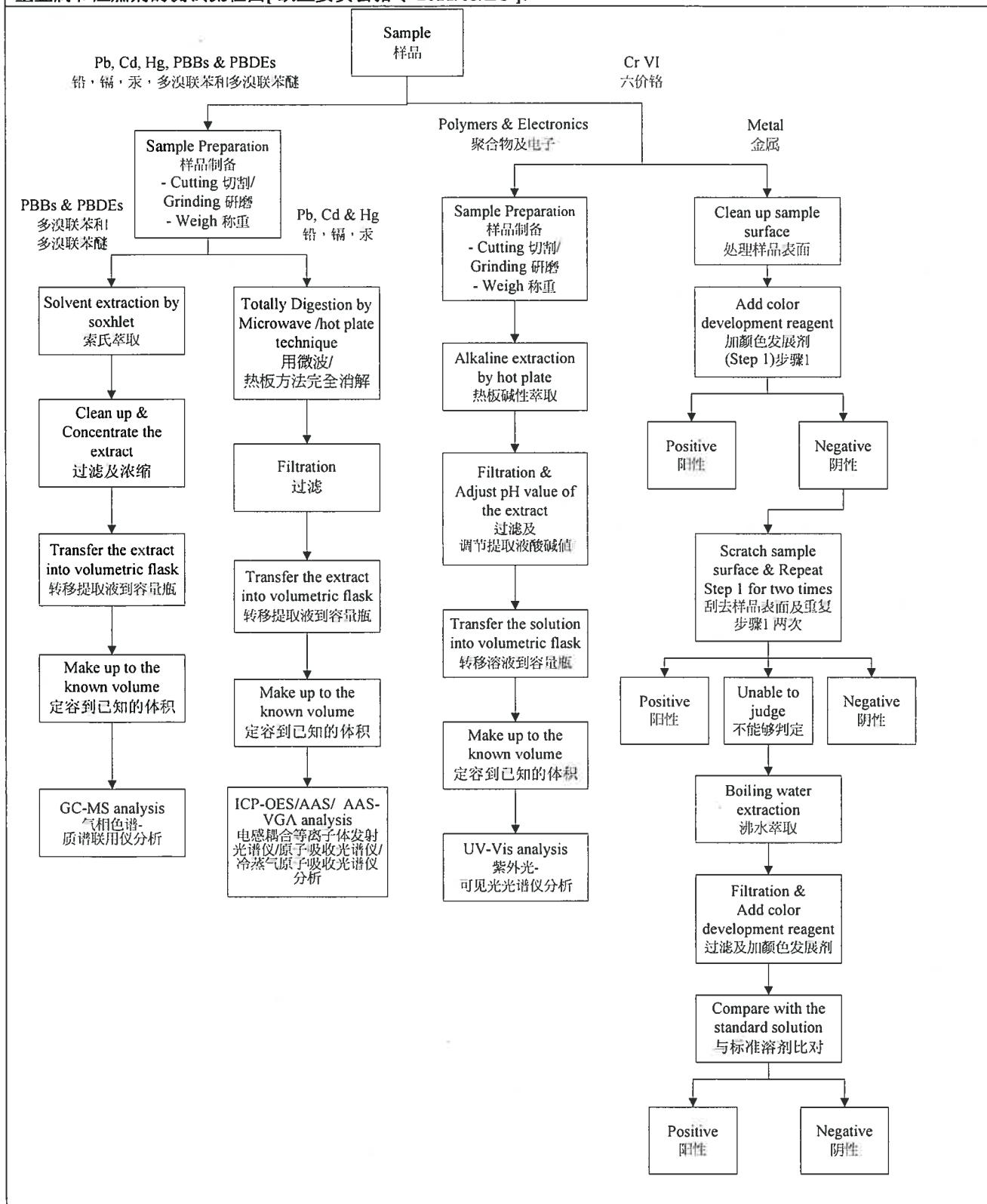




BUREAU
VERITAS

APPENDIX 附录

Test Flowchart of Heavy Metals and Flame Retardants Content [European Council Directive 2011/65/EU]:
重金属和阻燃剂的测试流程图[欧盟委员会指令 2011/65/EU]:



检测报告

报告编号 RLSZE001464880001C

第 1 页 共 3 页

申请单位 厦门大嘉美印刷有限公司

地 址 厦门同安工业集中区思明园15-16号

以下测试之样品及样品信息由申请者提供并确认

样品名称 油墨

供应商 牡丹

样品接收日期 2012. 10. 23

样品检测日期 2012. 10. 23—2012. 10. 26

检测要求 根据客户要求，对所提交样品中的氟(F)，氯(Cl)，溴(Br)，碘(I)进行测试。

检测依据

测试项目	测试方法	测试仪器	方法检测限
氟(F)	参考BS EN 14582:2007	IC	10 mg/kg
氯(Cl)	参考BS EN 14582:2007	IC	10 mg/kg
溴(Br)	参考BS EN 14582:2007	IC	10 mg/kg
碘(I)	参考BS EN 14582:2007	IC	10 mg/kg

检测结果 请参见下页。

主 检
批 准

林瑞坤
刘少蔚

技术经理



审 核
日 期

何贵兵

2012. 10. 26

No.11033293

深圳市华测检测技术股份有限公司

广东省深圳市宝安区70区鸿威工业园

检测报告

报告编号 RLSZE001464880001C

第 2 页 共 3 页

检测结果

测试项目	结果
卤素	
氟 (F)	N. D.
氯 (Cl)	118 mg/kg
溴 (Br)	N. D.
碘 (I)	N. D.

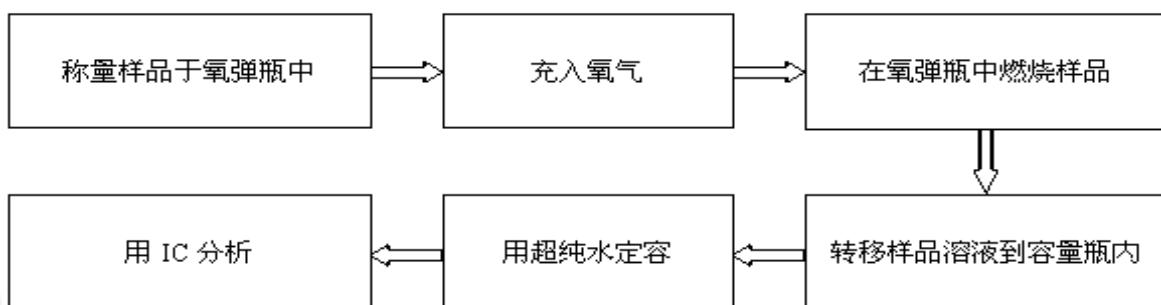
测试样品/部位描述 红色油墨

注释: -N.D. = 未检出 (小于方法检测限)

-mg/kg = ppm = 百万分之几

备注: 报告编号中“C”表示此报告为中文版本。

检测流程

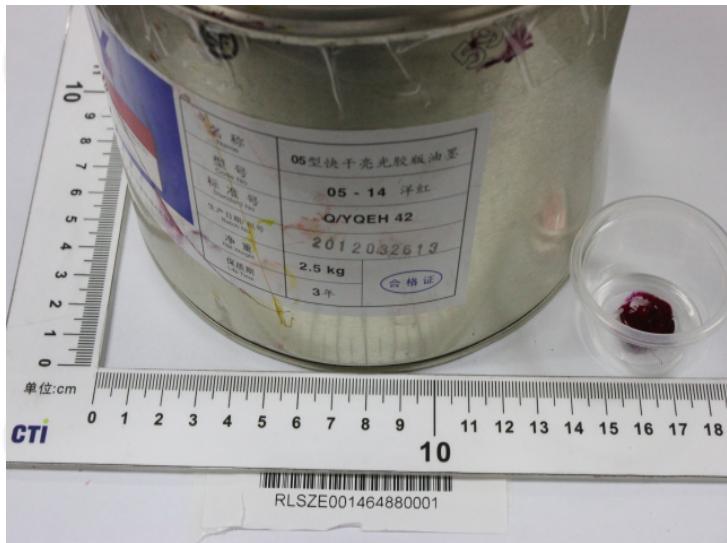


检测报告

报告编号 RLSZE001464880001C

第 3 页 共 3 页

样品图片



报告结束

检测报告无批准人签字及“报告专用章”无效，本报告检测结果仅对受测样品负责。未经CTI书面同意，不得部分复制本报告。