(In compliance with EC/1907/2006 Article 31 and Annex II)
Revision Date: 23/10/2012
Revision Number: 0
Material/Trade Name: PALETTE TONER - ACTIVATOR

1 – Identification of Substance/Mixture and of the Company/Undertaking

Material/Trade Name : Palette Toner - Activator
Material type : Photographic process reagent
Company : Jay House Ltd
Address : 6B Park Lane Industrial Estate
Park Lane
Corsham
SN13 9LG
Telephone : 01249 714555
Fax : 01249 714999
Internet : info@fotospeed.com

2 – Hazards Identification

Classification of the substance or mixture

Not classified as hazardous according to Regulation (EC) No.1272/2008

Not classified as hazardous according to European Directive 67/548/EEC as amended

3 – Composition/Information on Ingredients

CAS No.	EC No.	Index No.	Classification	Concentration
Potassium dichromate				
7778-50-9	231-906-6	024-002-00-6	Ox. Sol. 2, Carc. 1B, Muta. 1B, Repr. 1B, Acute Tox. 2, Acute. Tox. 3, STOT RE 1, Acute Tox. 4, Skin Corr. 1B, Resp. Sens. 1B, Skin Sens. 1, Aquatic Acute 1, Aquatic Chronic 1. H272, H350, H340, H360FD, H330, H301, H372, H312, H314, H334, H317, H400, H410 O; R8, Carc. Cat. 2; R45, Muta. Cat. 2; R46, Repr. Cat. 2; R60-61, T+; R26, T; R25-48/23, Xn; R21, C; R34, R42/43, N; 50-53	0.02 % w/w
Potassium ferricyanide				
13746-66-2	237-323-3	[-]	EUH032 R32	4 %w/w

4 - First-aid Measures

Inhalation:
Remove to fresh air and rest. If recovery is not rapid call for prompt medical attention. Show this safety data sheet to medical personnel.
Eyes
Irrigate with water for at least 15 minutes. Take care not to wash chemical from one eye to another. If irritation persists, obtain medical attention.
Skin
Remove contaminated clothing. Wash with soap/cleanser and rinse with plenty of water. If irritation persists, obtain medical attention.
Ingestion
Do NOT induce vomiting. Give plenty of water to drink. If feeling unwell seek prompt medical attention.

5 - Fire-fighting Measures

Suitable Extinguishers
Use media such as alcohol/aqueous foam, dry chemical, or carbon dioxide or water spray/fog which are suitable and appropriate for any surrounding fire.
Unsuitable Extinguishers
None.
Hazardous Decomposition
Carbon oxides, Potassium oxides, chromium oxides
Special Procedures/information for firefighters
Do not breathe decomposition products and fumes. Use approved self-contained breathing apparatus. Wear fire retardant clothing. Use water spray to cool containers. Prevent runoff from fire control from entering waterways. Large fires should only be dealt with by trained personnel.

6 - Accidental Release Measures

Personal Protection and Precautions
Use suitable personal protective equipment (refer to Section 8 for details). Avoid breathing vapours. Ensure adequate ventilation.

Environmental Precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains or watercourses.

Containment, Cleaning up and Disposal Considerations
Absorb in inert material such as sand or non-combustible absorbent granules
Scoop up and place in plastic container to await transfer
Refer to Section 13 for further information regarding disposal.

7 - Handling and Storage

Handling
Avoid inhalation of vapour or mist.
Storage
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

8 - Exposure Controls/Personal Protection

Occupational Exposure Limit: 0.05 mg/m^3 8hrTWA WEL Potassium Dichromate
5 mg/m3 8hrTWA WEL Potassium Ferricyanide

Respiratory Protection
Use in well ventilated areas. Use mechanical ventilation if possible.
Hand Protection
Wear polythene, PVC or nitrile gloves to Standard EN 374 (breakthrough time for total immersion in excess of 8 hours).
Eye Protection
Wear suitable eye protection such as safety glasses or goggles to Standard BS EN 166 if splash or eye contact likely.
Skin Protection
Wear suitable overalls or apron and change if contaminated. After contact with skin wash off immediately. Wash hands before breaks and immediately after using the product.

9 - Physical & Chemical Properties

Appearance : Liquid
Odour : None
pH : 5
Boiling point/range : n/e
Melting point/range : n/e
Flash point : n/e
Flammability : NON FLAMMABLE
Autoflammability : n/e
Explosive properties : n/e
Oxidising properties : None
Vapour pressure : n/e
Relative density : n/e
Solubility : Miscible in water
Partition Coefficient : n/e
Vapour Density : n/e
Viscosity : n/e
Evaporation rate : n/e

(n/e = not established)

10 - Stability and Reactivity

Chemical Stability
Stable at normal temperatures and under recommended storage conditions.
Conditions to Avoid
Extreme temperature and direct sunlight, acidic environments
Materials to Avoid
Metal, Alkali metals, Organic materials, powdered metals, acids, hydrazine
Hazardous Decomposition Products
No hazardous decomposition products when stored and handled correctly.

11 - Toxicological Information

Acute toxicity
Low toxicity by all routes. For pure potassium dichromate;

LD_{50} Oral, rat (acute lethal effects) >25, ≤200mg/kg.

LC_{50} Inhalation, rat (acute lethal effects) from vapours ≤0.5mg/litre/4h & >400, ≤2000m/kg

Inhalation, rat severe effects after repeated/prolonged exposure ≤0.025mg/litre/6h/day

Skin corrosion/irritation
Not expected to cause any acute skin corrosion or irritation at concentrations present in product
Serious eye damage/eye irritation
Not expected to cause any acute eye damage or irritation at levels present in product; low level transient eye irritation may be possible following exposure.
Respiratory or skin sensitisation
May cause allergic respiratory reaction
Germ cell mutagenicity
No data available

Carcinogenicity
IARC: No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity
No data available
Specific target organ toxicity - single exposure
No data available.
Specific target organ toxicity - repeated exposure
No data available.

Potential health effects
Inhalation Excessive inhalation of vapours, aerosols or mists may cause mild, transient respiratory tract irritation.
Ingestion May be harmful if ingested in quantity.
Skin Repeated exposure may cause skin dryness or cracking.
Eyes May cause transient eye irritation.

Signs and Symptoms of Exposure
Ulceration, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

12 - Ecological Information

Toxicity
Not expected to be harmful to aquatic life.

Persistence and degradability
No data available.

Mobility in soil
No data available.

PBT and vPvB assessment
No data available.

Bioaccumulative potential
Not expected to be able to bioaccumulate

Other adverse effects
None expected

13 -Disposal Considerations

Product
Material is classified as hazardous waste under the Hazardous Waste Regulations 2005 as amended. Contact a licensed professional waste disposal service to dispose of this material.
Contaminated packaging
Dispose of as unused product.

14 -Transport Information

ADR/RID	Not classified as hazardous for transport
IMDG	Not classified as hazardous for transport
IATA	Not classified as hazardous for transport

15 - Regulatory Information

Label Elements

No statutory safety labels are required for this material in accordance with the provisions of EC/1907/2006, EC/1272/2008 or 67/548/EEC as amended

Other Regulations

Health & Safety at Work etc. Act 1974
Control of Substances Hazardous to Health Regulations 2002 (as amended)
Chemicals (Hazard Information and Packaging for Supply) Regulations 2009
Classification, Labelling and Packaging of Substances and Mixtures Regulations 2008 (as amended)
EH40/2005 Workplace Exposure Limits (as amended)
Environmental Protection Act 1990
Hazardous Waste Regulations 2005 (as amended)

16 - Other Information

Text of H-code(s) and R-phrase(s) mentioned in Section 3

H272	May intensify fire; oxidiser.
H301	Toxic if swallowed.
H312	Harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H330	Fatal if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H340	May cause genetic defects.
H350	May cause cancer.
H360	May damage fertility or the unborn child.
H372	Causes damage to organs through prolonged or repeated exposure.
H410	Very toxic to aquatic life with long lasting effects.
EUH032	Contact with acids liberate very toxic gas

R45	May cause cancer.
R46	May cause heritable genetic damage.
R60	May impair fertility.
R61	May cause harm to the unborn child.
R21	Also harmful in contact with skin.
R25	Also toxic if swallowed.
R26	Also very toxic by inhalation.
R48/23	Also toxic: danger of serious damage to health by prolonged exposure through inhalation.
R 8	Contact with combustible material may cause fire.
R34	Causes burns.
R42/43	May cause sensitization by inhalation and skin contact.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
R32	Contact with acids liberate very toxic gas

Recommended restrictions on use
Use in accordance with manufacturer's technical instructions.

Revision History
First Issue

Further Information
The information in this Safety Data Sheet should be provided to all who will use, handle, store, transport or otherwise be exposed to this product. This information has been prepared for the guidance of plant engineering, operations, management and for people working with or handling these products. This information is believed to be reliable and updated at Revision Date, and represents the best information currently available and known by Jay House Ltd. (Jay House). However, Jay House makes no guarantee or warranty, express or implied, with respect to such information and we assume no liability resulting from its use. The information related herein is based on proper handling and anticipated uses and is for the material without chemical additions or alterations. Users should make their own investigations to determine the suitability of the information for their particular purposes. It is the responsibility of the user to undertake a suitable risk assessment/COSHH assessment prior to using this material.

(In compliance with EC/1907/2006 Article 31 and Annex II)
Revision Date: 30/10/2012
Revision Number: 0
Material/Trade Name: PALETTE TONER - INTENSIFIER

1 – Identification of Substance/Mixture and of the Company/Undertaking

Material/Trade Name : Palette Toner - Intensifier
Material type : Photographic process reagent
Company : Jay House Ltd
Address : 6B Park Lane Industrial Estate
Park Lane
Corsham
SN13 9LG
Telephone : 01249 714555
Fax : 01249 714999
Internet : info@fotospeed.com

2 – Hazards Identification

Classification of the substance or mixture

Not classified as hazardous according to Regulation (EC) No.1272/2008

Not classified as hazardous according to European Directive 67/548/EEC as amended
Contact with acids liberates very toxic gas (Hydrogen Cyanide)

3 – Composition/Information on Ingredients

CAS No.	EC No.	Index No.	Classification	Concentration
Potassium Bromide				
7758-02-3	231-830-3	-	Eye Irrit. 2, STOT SE 3, Skin Irrit. 2 H219, H335, H315 Xi; 36/37/38	<1 %

4 - First-aid Measures

Inhalation:
Remove to fresh air and rest. If recovery is not rapid call for prompt medical attention. Show this safety data sheet to medical personnel.
Eyes
Irrigate with water for at least 15 minutes. Take care not to wash chemical from one eye to another. If irritation persists, obtain medical attention.
Skin
Remove contaminated clothing. Wash with soap/cleanser and rinse with plenty of water. If irritation persists, obtain medical attention.
Ingestion
Do NOT induce vomiting. Give plenty of water to drink. If feeling unwell seek prompt medical attention.

5 - Fire-fighting Measures

Suitable Extinguishers
Use media such as alcohol/aqueous foam, dry chemical, or carbon dioxide or water spray/fog which are suitable and appropriate for any surrounding fire.
Unsuitable Extinguishers
None.
Hazardous Decomposition
Hydrogen bromide gas, Potassium oxides
Special Procedures/information for fire-fighters
Do not breathe decomposition products and fumes. Use approved self-contained breathing apparatus. Wear fire retardant clothing. Use water spray to cool containers. Prevent runoff from fire control from entering waterways. Large fires should only be dealt with by trained personnel.

6 - Accidental Release Measures

Personal Protection and Precautions
Use suitable personal protective equipment (refer to Section 8 for details). Avoid breathing vapours. Ensure adequate ventilation.

Environmental Precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains or watercourses.

Containment, Cleaning up and Disposal Considerations
Absorb in inert material such as sand or non-combustible absorbent granules
Scoop up and place in plastic container to await transfer
Refer to Section 13 for further information regarding disposal.

7 - Handling and Storage

Handling
Avoid inhalation of vapour or mist.
Storage
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

8 - Exposure Controls/Personal Protection

Occupational Exposure Limit: Non assigned

Respiratory Protection
Use in well ventilated areas. Use mechanical ventilation if possible.
Hand Protection
Wear polythene, PVC or nitrile gloves to Standard EN 374 (breakthrough time for total immersion in excess of 8 hours).
Eye Protection
Wear suitable eye protection such as safety glasses or goggles to Standard BS EN 166 if splash or eye contact likely.
Skin Protection
Wear suitable overalls or apron and change if contaminated. After contact with skin wash off immediately. Wash hands before breaks and immediately after using the product.

9 - Physical & Chemical Properties

Appearance : Liquid
Odour : None
pH : 9.7
Boiling point/range : n/e
Melting point/range : n/e
Flash point : n/e
Flammability : NON FLAMMABLE
Autoflammability : n/e
Explosive properties : n/e
Oxidising properties : None
Vapour pressure : n/e
Relative density : n/e
Solubility : Miscible in water
Partition Coefficient : n/e
Vapour Density : n/e
Viscosity : n/e
Evaporation rate : n/e

(n/e = not established)

10 - Stability and Reactivity

Chemical Stability
Stable at normal temperatures and under recommended storage conditions.
Conditions to Avoid
Extreme temperature and direct sunlight.
Materials to Avoid
Strong oxidizing agents, Strong acids, Heavy metal salts, Aluminium, Potassium
Decomposition Products
No hazardous decomposition products when stored and handled correctly.

11 - Toxicological Information

Acute toxicity
Low toxicity by all routes.
Skin corrosion/irritation
Not expected to cause any acute skin corrosion or irritation at concentrations present in product
Serious eye damage/eye irritation
Not expected to cause any acute eye damage or irritation at levels present in product; low level transient eye irritation may be possible following exposure.
Respiratory or skin sensitisation
Not expected to have sensitisation potential
Germ cell mutagenicity
No data available

Carcinogenicity
IARC: No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity
No data available.
Specific target organ toxicity - single exposure
No data available.
Specific target organ toxicity - repeated exposure
No data available.

Potential health effects
Inhalation Excessive inhalation of vapours, aerosols or mists may cause mild, transient respiratory tract irritation.
Ingestion May be harmful if ingested in quantity.
Skin Repeated exposure may cause skin dryness or cracking.
Eyes May cause transient eye irritation.

Signs and Symptoms of Exposure
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12 - Ecological Information

Toxicity

Not expected to be harmful to aquatic life.

Persistence and degradability
No data available
Mobility in soil
No data available
PBT and vPvB assessment
No data available

Bioaccumulative potential
No data available
Other adverse effects
Harmful to aquatic life

13 -Disposal Considerations

Product
Material is not classified as hazardous waste under the Hazardous Waste Regulations 2005 as amended. Follow supplier's instructions regarding safe disposal methods. Reuse and recycle material where possible.
Contaminated packaging
Dispose of as unused product.

14 -Transport Information

ADR/RID	Not classified as hazardous for transport
IMDG	Not classified as hazardous for transport
IATA	Not classified as hazardous for transport

15 - Regulatory Information

Label Elements

No statutory safety labels are required for this material in accordance with the provisions of EC/1907/2006, EC/1272/2008 or 67/548/EEC as amended

Other Regulations
Health & Safety at Work etc. Act 1974
Control of Substances Hazardous to Health Regulations 2002 (as amended)
Chemicals (Hazard Information and Packaging for Supply) Regulations 2009
Classification, Labelling and Packaging of Substances and Mixtures Regulations 2008 (as amended)
EH40/2005 Workplace Exposure Limits (as amended)
Environmental Protection Act 1990
Hazardous Waste Regulations 2005 (as amended)

16 - Other Information

Text of H-code(s) and R-phrase(s) mentioned in Section 3

H319	Causes serious eye irritation
H335	May cause respiratory irritation
H315	Causes skin irritation
R36/37/38	Irritating to eyes, respiratory system and skin

Recommended restrictions on use
Use in accordance with manufacturer's technical instructions.

Revision History
First Issue

Further Information
The information in this Safety Data Sheet should be provided to all who will use, handle, store, transport or otherwise be exposed to this product. This information has been prepared for the guidance of plant engineering, operations, management and for people working with or handling these products. This information is believed to be reliable and updated at Revision Date, and represents the best information currently available and known by Jay House Ltd. (Jay House). However, Jay House makes no guarantee or warranty, express or implied, with respect to such information and we assume no liability resulting from its use. The information related herein is based on proper handling and anticipated uses and is for the material without chemical additions or alterations. Users should make their own investigations to determine the suitability of the information for their particular purposes. It is the responsibility of the user to undertake a suitable risk assessment/COSHH assessment prior to using this material.

(In compliance with EC/1907/2006 Article 31 and Annex II)
Revision Date: 30/10/2012
Revision Number: 0
Material/Trade Name: PALETTE TONER - BLUE

1 – Identification of Substance/Mixture and of the Company/Undertaking

Material/Trade Name : Palette Toner - Blue
Material type : Photographic process reagent
Company : Jay House Ltd
Address : 6B Park Lane Industrial Estate
Park Lane
Corsham
SN13 9LG
Telephone : 01249 714555
Fax : 01249 714999
Internet : info@fotospeed.com

2 – Hazards Identification

Classification of the substance or mixture
Not classified as hazardous according to Regulation (EC) No.1272/2008

Not classified as hazardous according to European Directive 67/548/EEC as amended

3 – Composition/Information on Ingredients

CAS No.	EC No.	Index No.	Classification	Concentration
Oxalic Acid				
144-62-7	205-634-3	607-006-00-8	Acute Tox. 4, Acute Tox. 4 H302, H312 Xn; R21/22	4% w/w
Ammonium iron bis(sulphate)				
7783-83-7	233-382-4	-	Eye Irrit. 2, Skin Irrit. 2, H319, H315 Xi; R36/38	4% w/w

4 - First-aid Measures

Inhalation:
Remove to fresh air and rest. If recovery is not rapid call for prompt medical attention. Show this safety data sheet to medical personnel.
Eyes
Irrigate with water for at least 15 minutes. Take care not to wash chemical from one eye to another. If irritation persists, obtain medical attention.
Skin
Remove contaminated clothing. Wash with soap/cleanser and rinse with plenty of water. If irritation persists, obtain medical attention.
Ingestion
Do NOT induce vomiting. Give plenty of water to drink. If feeling unwell seek prompt medical attention.

5 - Fire-fighting Measures

Suitable Extinguishers
Use media such as alcohol/aqueous foam, dry chemical, or carbon dioxide or water spray/fog which are suitable and appropriate for any surrounding fire.
Unsuitable Extinguishers
None.
Hazardous Decomposition
Carbon oxides, nitrogen oxides (NOx), Sulphur oxides, Iron oxides, Potassium oxides, chromium oxides
Special Procedures/information for firefighters
Do not breathe decomposition products and fumes. Use approved self-contained breathing apparatus. Wear fire retardant clothing. Use water spray to cool containers. Prevent runoff from fire control from entering waterways. Large fires should only be dealt with by trained personnel.

6 - Accidental Release Measures

Personal Protection and Precautions
Use suitable personal protective equipment (refer to Section 8 for details). Avoid breathing vapours. Ensure adequate ventilation.

Environmental Precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains or watercourses.

Containment, Cleaning up and Disposal Considerations
Absorb in inert material such as sand or non-combustible absorbent granules
Scoop up and place in plastic container to await transfer
Refer to Section 13 for further information regarding disposal.

7 - Handling and Storage

Handling
Avoid inhalation of vapour or mist.
Storage
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

8 - Exposure Controls/Personal Protection

Occupational Exposure Limit: 1 mg/m^3 8hrTWA WEL Ammonium iron bis (sulphate)
1 mg/m^3 8hrTWA WEL Oxalic Acid

Respiratory Protection
Use in well ventilated areas. Use mechanical ventilation if possible.
Hand Protection
Wear polythene, PVC or nitrile gloves to Standard EN 374 (breakthrough time for total immersion in excess of 8 hours).
Eye Protection
Wear suitable eye protection such as safety glasses or goggles to Standard BS EN 166 if splash or eye contact likely.
Skin Protection
Wear suitable overalls or apron and change if contaminated. After contact with skin wash off immediately. Wash hands before breaks and immediately after using the product.

9 - Physical & Chemical Properties

Appearance : Liquid
Odour : None
pH : 1.5
Boiling point/range : n/e
Melting point/range : n/e
Flash point : n/e
Flammability : NON FLAMMABLE
Autoflammability : n/e
Explosive properties : n/e
Oxidising properties : None
Vapour pressure : n/e
Relative density : n/e
Solubility : Miscible in water
Partition Coefficient : n/e
Vapour Density : n/e
Viscosity : n/e
Evaporation rate : n/e

(n/e = not established)

10 - Stability and Reactivity

Chemical Stability
Stable at normal temperatures and under recommended storage conditions.
Conditions to Avoid
Extreme temperature and direct sunlight, moist environments
Materials to Avoid
Metals, Alkali metals, Strong oxidizing agents
Hazardous Decomposition Products
No hazardous decomposition products when stored and handled correctly.

11 - Toxicological Information

Acute toxicity
Low toxicity by all routes. For pure Oxalic Acid;

LD_{50} oral, rat (acute lethal effects) >200, ≤2000mg/kg.

LD_{50} dermal, rat/rabbit (acute lethal effects) >400, ≤2000mg/kg

Skin corrosion/irritation
Not expected to cause any acute skin corrosion or irritation
Serious eye damage/eye irritation
Not expected to cause any acute eye damage or irritation; low level transient eye irritation may be possible following exposure to liquid or vapours.
Respiratory or skin sensitisation
Not expected to have sensitisation potential

Germ cell mutagenicity
No data available

Carcinogenicity
IARC: No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity
No data available

Specific target organ toxicity - single exposure
No data available.

Specific target organ toxicity - repeated exposure
No data available.

Potential health effects
Inhalation Excessive inhalation of vapours, aerosols or mists may cause mild, transient respiratory tract irritation.
Ingestion May be harmful if ingested in quantity.
Skin Repeated exposure may cause skin dryness or cracking.
Eyes May cause transient eye irritation

Signs and Symptoms of Exposure
To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

12 - Ecological Information

Toxicity
Not expected to be harmful to aquatic life.

Persistence and degradability
Readily biodegradable.

Mobility in soil
No data available.

PBT and vPvB assessment
No data available.

Bioaccumulative potential
No data available.

Other adverse effects
No data available.

13 -Disposal Considerations

Product
Material is classified as hazardous waste under the Hazardous Waste Regulations 2005 as amended). Contact a licensed professional waste disposal service to dispose of this material.
Contaminated packaging
Dispose of as unused product.

14 -Transport Information

ADR/RID	Not classified as hazardous for transport
IMDG	Not classified as hazardous for transport
IATA	Not classified as hazardous for transport

15 - Regulatory Information

Label Elements

Pictogram

Signal Word Warning

Hazard Statement(s)

H302	Harmful if swallowed
H312	Harmful in contact with skin

Precautionary statement(s)

P301 + P312	If swallowed: Call a poisons centre or doctor/physician.
P330	Rinse mouth
P302 + P352	If on skin: Wash with plenty of soap and water

Other Regulations

Health & Safety at Work etc. Act 1974
Control of Substances Hazardous to Health Regulations 2002 (as amended)
Chemicals (Hazard Information and Packaging for Supply) Regulations 2009
Classification, Labelling and Packaging of Substances and Mixtures Regulations 2008 (as amended)
EH40/2005 Workplace Exposure Limits (as amended)
Environmental Protection Act 1990
Hazardous Waste Regulations 2005 (as amended)

16 - Other Information

Text of H-code(s) and R-phrase(s) mentioned in Section 3

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H319	Causes serious eye irritation
H315	Causes skin irritation
R21/22	Harmful in contact with skin and if swallowed
R36/38	Irritating to eyes and skin.

Recommended restrictions on use
Use in accordance with manufacturer's technical instructions.

Revision History
First Issue

Further Information
The information in this Safety Data Sheet should be provided to all who will use, handle, store, transport or otherwise be exposed to this product. This information has been prepared for the guidance of plant engineering, operations, management and for people working with or handling these products. This information is believed to be reliable and updated at Revision Date, and represents the best information currently available and known by Jay House Ltd. (Jay House). However, Jay House makes no guarantee or warranty, express or implied, with respect to such information and we assume no liability resulting from its use. The information related herein is based on proper handling and anticipated uses and is for the material without chemical additions or alterations. Users should make their own investigations to determine the suitability of the information for their particular purposes. It is the responsibility of the user to undertake a suitable risk assessment/COSHH assessment prior to using this material.

(In compliance with EC/1907/2006 Article 31 and Annex II)
Revision Date: 30/10/2012
Revision Number: 0
Material/Trade Name: PALETTE TONER – TITANIUM YELLOW

1 – Identification of Substance/Mixture and of the Company/Undertaking

Material/Trade Name : Palette Toner – Titanium Yellow
Material type : Photographic process reagent
Company : Jay House Ltd
Address : 6B Park Lane Industrial Estate
Park Lane
Corsham
SN13 9LG
Telephone : 01249 714555
Fax : 01249 714999
Internet : info@fotospeed.com

2 – Hazards Identification

Classification of the substance or mixture

Not classified as hazardous according to Regulation (EC) No.1272/2008

Not classified as hazardous according to European Directive 67/548/EEC as amended

3 – Composition/Information on Ingredients

CAS No.	EC No.	Index No.	Classification	Concentration
Hydrochloric Acid				
7647-01-0	231-595-7	017-002-01-X	Skin Corr. 1B, STOT SE 3 H314, H335 C; R34, Xi; R37	<4.4% w/w
Titanium (IV) Chloride				
7550-45-0	231-444-5	022-001-00-5	Skin Corr. 1B H314 C; R34	3% w/w

4 - First-aid Measures

Inhalation:
Remove to fresh air and rest. If recovery is not rapid call for prompt medical attention. Show this safety data sheet to medical personnel.
Eyes
Irrigate with water for at least 15 minutes. Take care not to wash chemical from one eye to another. If irritation persists, obtain medical attention.
Skin
Remove contaminated clothing. Wash with soap/cleanser and rinse with plenty of water. If irritation persists, obtain medical attention.
Ingestion
Do NOT induce vomiting. Give plenty of water to drink. If feeling unwell seek prompt medical attention.

5 - Fire-fighting Measures

Suitable Extinguishers
Use media such as alcohol/aqueous foam, dry chemical, or carbon dioxide or water spray/fog which are suitable and appropriate for any surrounding fire.
Unsuitable Extinguishers
None.
Hazardous Decomposition
Hydrogen chloride gas and Titanium/titanium oxides.
Special Procedures/information for fire-fighters
Do not breathe decomposition products and fumes. Use approved self-contained breathing apparatus. Wear fire retardant clothing. Use water spray to cool containers. Prevent runoff from fire control from entering waterways. Large fires should only be dealt with by trained personnel.

6 - Accidental Release Measures

Personal Protection and Precautions
Use suitable personal protective equipment (refer to Section 8 for details). Avoid breathing vapours. Ensure adequate ventilation.

Environmental Precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains or watercourses.

Containment, Cleaning up and Disposal Considerations
Absorb in inert material such as sand or non-combustible absorbent granules
Scoop up and place in plastic container to await transfer
Refer to Section 13 for further information regarding disposal.

7 - Handling and Storage

Handling
Avoid inhalation of vapour or mist.
Storage
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

8 - Exposure Controls/Personal Protection

Occupational Exposure Limit: 8 mg/m^3 8hrTWA WEL Hydrochloric Acid

Respiratory Protection
Use in well ventilated areas. Use mechanical ventilation if possible.
Hand Protection
Wear polythene, PVC or nitrile gloves to Standard EN 374 (breakthrough time for total immersion in excess of 8 hours).
Eye Protection
Wear suitable eye protection such as safety glasses or goggles to Standard BS EN 166 if splash or eye contact likely.
Skin Protection
Wear suitable overalls or apron and change if contaminated. After contact with skin wash off immediately. Wash hands before breaks and immediately after using the product.

9 - Physical & Chemical Properties

Appearance : Liquid
Odour : None
pH : n/e
Boiling point/range : n/e
Melting point/range : n/e
Flash point : n/e
Flammability : NON FLAMMABLE
Autoflammability : n/e
Explosive properties : n/e
Oxidising properties : None
Vapour pressure : n/e
Relative density : n/e
Solubility : Miscible in water
Partition Coefficient : n/e
Vapour Density : n/e
Viscosity : n/e
Evaporation rate : n/e

(n/e = not established)

10 - Stability and Reactivity

Chemical Stability
Stable at normal temperatures and under recommended storage conditions.
Conditions to Avoid
Extreme temperature and direct sunlight, moist environments
Materials to Avoid
Strong oxidizing agents, Water, Bases, Amines, Alkali metals, Metals, permanganates, e.g. potassium permanganate, Fluorine, metal acetylides, hexalithium disilicide.
Hazardous Decomposition Products
No hazardous decomposition products when stored and handled correctly.

11 - Toxicological Information

Acute toxicity
Low toxicity by all routes.
Skin corrosion/irritation
Not expected to cause any acute skin corrosion or irritation at concentrations present in product
Serious eye damage/eye irritation
Not expected to cause any acute eye damage or irritation at levels present in product; low level transient eye irritation may be possible following exposure
Respiratory or skin sensitisation
Not expected to have sensitisation potential
Germ cell mutagenicity
No data available

Carcinogenicity
IARC: No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity
No data available

Specific target organ toxicity - single exposure
No data available
Specific target organ toxicity - repeated exposure
No data available.

Potential health effects
Inhalation Excessive inhalation of vapours, aerosols or mists may cause mild, transient respiratory tract irritation.
Ingestion May be harmful if ingested in quantity.
Skin Repeated exposure may cause skin dryness or cracking.
Eyes May cause transient eye irritation

Signs and Symptoms of Exposure
Burning sensation, Cough, wheezing, laryngitis, Shortness of breath, spasm, inflammation and oedema of the larynx, spasm, inflammation and oedema of the bronchi, pneumonitis, pulmonary oedema, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

12 - Ecological Information

Toxicity
No data available

Persistence and degradability
No data available.

Mobility in soil
No data available.

PBT and vPvB assessment
No data available.

Bioaccumulative potential
No data available.

Other adverse effects
No data available.

13 -Disposal Considerations

Product
Material is not classified as hazardous waste under the Hazardous Waste Regulations 2005. Follow supplier's instructions regarding safe methods of disposal. Reuse and recycle material where possible.
Contaminated packaging
Dispose of as unused product.

14 -Transport Information

ADR/RID	Not classified as hazardous for transport
IMDG	Not classified as hazardous for transport
Marine pollutant:	No
IATA	Not classified as hazardous for transport

15 - Regulatory Information

Label Elements

No statutory safety labels are required for this material in accordance with the provisions of EC/1907/2006, EC/1272/2008 or 67/548/EEC as amended
Other Regulations
Health & Safety at Work etc. Act 1974
Control of Substances Hazardous to Health Regulations 2002 (as amended)
Chemicals (Hazard Information and Packaging for Supply) Regulations 2009
Classification, Labelling and Packaging of Substances and Mixtures Regulations 2008 (as amended)
EH40/2005 Workplace Exposure Limits (as amended)
Environmental Protection Act 1990
Hazardous Waste Regulations 2005 (as amended)

16 - Other Information

Text of H-code(s) and R-phrase(s) mentioned in Section 3

H330	Fatal if inhaled
H301	Toxic if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H335	May cause respiratory irritation
H314	Causes severe burns and eye damage

R34	Causes burns
R25	Toxic if swallowed
R26	Very toxic by inhalation
R36/37/38	Irritating to eyes, respiratory system and skin.

Recommended restrictions on use
Use in accordance with manufacturer's technical instructions.

Revision History
First Issue

Further Information
The information in this Safety Data Sheet should be provided to all who will use, handle, store, transport or otherwise be exposed to this product. This information has been prepared for the guidance of plant engineering, operations, management and for people working with or handling these products. This information is believed to be reliable and updated at Revision Date, and represents the best information currently available and known by Jay House Ltd. (Jay House). However, Jay House makes no guarantee or warranty, express or implied, with respect to such information and we assume no liability resulting from its use. The information related herein is based on proper handling and anticipated uses and is for the material without chemical additions or alterations. Users should make their own investigations to determine the suitability of the information for their particular purposes. It is the responsibility of the user to undertake a suitable risk assessment/COSHH assessment prior to using this material.

(In compliance with EC/1907/2006 Article 31 and Annex II)
Revision Date: 30/10/2012
Revision Number: 0
Material/Trade Name: PALETTE TONER – VANADIUM YELLOW

1 – Identification of Substance/Mixture and of the Company/Undertaking

Material/Trade Name : Palette Toner – Vanadium Yellow
Material type : Photographic process reagent
Company : Jay House Ltd
Address : 6B Park Lane Industrial Estate
Park Lane
Corsham
SN13 9LG
Telephone : 01249 714555
Fax : 01249 714999
Internet : info@fotospeed.com

2 – Hazards Identification

Classification of the substance or mixture

According to Regulation (EC) No.1272/2008
Acute Toxic (Category 2) H330 Fatal if inhaled

According to European Directive 67/548/EEC as amended

T; Toxic
R23 Toxic by inhalation

3 – Composition/Information on Ingredients

CAS No.	EC No.	Index No.	Classification	Concentration
Hydrochloric Acid				
7647-01-0	231-595-7	017-002-01-X	Skin Corr. 1B, STOT SE 3 H314, H335 C; R34, Xi; R37	<4.4% w/w
Ammonium metavanadate				
7803-55-6	232-261-3	-	Acute Tox. 3, Acute Tox. 2, Eye Irrit. 2, STOT SE 3, Skin Irrit. 2 H301, H330, H319, H335, H315 T+; R25, T; R26, Xi; 36/37/38	2.5% w/w

4 - First-aid Measures

Inhalation:
Remove to fresh air and rest. If recovery is not rapid call for prompt medical attention. Show this safety data sheet to medical personnel.
Eyes
Irrigate with water for at least 15 minutes. Take care not to wash chemical from one eye to another. If irritation persists, obtain medical attention.
Skin
Remove contaminated clothing. Wash with soap/cleanser and rinse with plenty of water. If irritation persists, obtain medical attention.
Ingestion
Do NOT induce vomiting. Give plenty of water to drink. If feeling unwell seek prompt medical attention.

5 - Fire-fighting Measures

Suitable Extinguishers
Use media such as alcohol/aqueous foam, dry chemical, or carbon dioxide or water spray/fog which are suitable and appropriate for any surrounding fire.
Unsuitable Extinguishers
None.
Hazardous Decomposition
Hydrogen chloride gas, nitrogen oxides (NOx), Sulphur oxides, Borane/boron oxides, Vanadium/vanadium oxides
Special Procedures/information for fire-fighters
Do not breathe decomposition products and fumes. Use approved self-contained breathing apparatus. Wear fire retardant clothing. Use water spray to cool containers. Prevent runoff from fire control from entering waterways. Large fires should only be dealt with by trained personnel.

6 - Accidental Release Measures

Personal Protection and Precautions
Use suitable personal protective equipment (refer to Section 8 for details). Avoid breathing vapours. Ensure adequate ventilation.

Environmental Precautions
Prevent further leakage or spillage if safe to do so. Do not let product enter drains or watercourses.

Containment, Cleaning up and Disposal Considerations
Absorb in inert material such as sand or non-combustible absorbent granules
Scoop up and place in plastic container to await transfer
Refer to Section 13 for further information regarding disposal.

7 - Handling and Storage

Handling
Avoid inhalation of vapour or mist.
Storage
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

8 - Exposure Controls/Personal Protection

Occupational Exposure Limit: 8 mg/m^3 8hrTWA WEL Hydrochloric Acid

Respiratory Protection
Use in well ventilated areas. Use mechanical ventilation if possible.
Hand Protection
Wear polythene, PVC or nitrile gloves to Standard EN 374 (breakthrough time for total immersion in excess of 8 hours).
Eye Protection
Wear suitable eye protection such as safety glasses or goggles to Standard BS EN 166 if splash or eye contact likely.
Skin Protection
Wear suitable overalls or apron and change if contaminated. After contact with skin wash off immediately. Wash hands before breaks and immediately after using the product.

9 - Physical & Chemical Properties

Appearance : Liquid
Odour : None
pH : n/e
Boiling point/range : n/e
Melting point/range : n/e
Flash point : n/e
Flammability : NON FLAMMABLE
Autoflammability : n/e
Explosive properties : n/e
Oxidising properties : None
Vapour pressure : n/e
Relative density : n/e
Solubility : Miscible in water
Partition Coefficient : n/e
Vapour Density : n/e
Viscosity : n/e
Evaporation rate : n/e

(n/e = not established)

10 - Stability and Reactivity

Chemical Stability
Stable at normal temperatures and under recommended storage conditions.
Conditions to Avoid
Extreme temperature and direct sunlight.
Materials to Avoid
Strong oxidizing agents, Water, Bases, Amines, Alkali metals, Metals, permanganates, e.g. potassium permanganate, Fluorine, metal acetylides, hexalithium disilicide.
Hazardous Decomposition Products
No hazardous decomposition products when stored and handled correctly.

11 - Toxicological Information

Acute toxicity
Toxic by inhalation. Ammonium Metavanadate;

LC_{50} Inhalation, rat (acute lethal effects) from vapours >0.5, ≤2mg/litre/4h

Skin corrosion/irritation
Not expected to cause any acute skin corrosion or irritation at concentrations present in product
Serious eye damage/eye irritation
Not expected to cause any acute eye damage or irritation at levels present in product; low level transient eye irritation may be possible following exposure
Respiratory or skin sensitisation
Not expected to have sensitisation potential
Germ cell mutagenicity
No data available

Carcinogenicity
IARC: No components of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity
No data available

Specific target organ toxicity - single exposure
No data available
Specific target organ toxicity - repeated exposure
Inhalation - May cause respiratory irritation.

Potential health effects
Inhalation May be fatal if inhaled. Causes respiratory tract irritation.
Ingestion May be harmful if ingested in quantity.
Skin Repeated exposure may cause skin dryness or cracking.
Eyes May cause transient eye irritation

Signs and Symptoms of Exposure
Burning sensation, Cough, wheezing, laryngitis, Shortness of breath, spasm, inflammation and oedema of the larynx, spasm, inflammation and oedema of the bronchi, pneumonitis, pulmonary oedema, Material is extremely destructive to tissue of the mucous membranes and upper respiratory tract, eyes, and skin.

12 - Ecological Information

Toxicity
Not expected to be harmful to aquatic life.

Persistence and degradability
No data available.

Mobility in soil
No data available.

PBT and vPvB assessment
No data available.

Bioaccumulative potential
No data available.

Other adverse effects
No data available.

13 -Disposal Considerations

Product
Material is classified as hazardous waste under the Hazardous Waste Regulations 2005 as amended). Contact a licensed professional waste disposal service to dispose of this material.
Contaminated packaging
Dispose of as unused product.

14 -Transport Information

ADR/RID	Not classified as hazardous for transport
IMDG	Not classified as hazardous for transport
Marine pollutant:	No
IATA	Not classified as hazardous for transport

15 - Regulatory Information

Label Elements

Pictogram

Signal Word Danger

Hazard Statement(s)
H330 Fatal if inhaled

Precautionary statement(s)
P304 + P340 If inhaled: remove victim to fresh air and keep at rest in position comfortable for breathing

Other Regulations
Health & Safety at Work etc. Act 1974
Control of Substances Hazardous to Health Regulations 2002 (as amended)
Chemicals (Hazard Information and Packaging for Supply) Regulations 2009
Classification, Labelling and Packaging of Substances and Mixtures Regulations 2008 (as amended)
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Environmental Protection Act 1990
Hazardous Waste Regulations 2005 (as amended)

16 - Other Information

Text of H-code(s) and R-phrase(s) mentioned in Section 3

H335	May cause respiratory irritation
H314	Causes severe burns and eye damage
H301	Toxic if swallowed
H330	Fatal if inhaled
H319	Causes serious eye irritation
H315	Causes skin irritation

R25	Toxic if swallowed
R26	Very toxic by inhalation
R36/37/38	Irritating to eyes, respiratory system and skin.

Recommended restrictions on use
Use in accordance with manufacturer's technical instructions.

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Further Information
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