SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II Version 2 Revision Date 27/02/2017

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

1.3

Product name : Cyanotype Sensitiser

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Photographic process reagent

Used advised against : None identified

Details of the supplier of the safety data sheet

Company : Jay House Ltd

6B Park Lane Industrial Estate

Park Lane Corsham SN13 9LG United Kingdom

Telephone : 01249 714555 E-mail address : info@fotospeed.com

1.4 Emergency telephone number

Emergency Phone : 01249 714555 (only available during office hours)

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008 [CLP]

Acute Toxicity (Category 4) H302

2.2 Label elements

Labelling according Regulation (EC) No 1272/2008 [CLP]



Pictogram

Signal word Warning

Hazard statement(s)

H302 Harmful if swallowed Precautionary statement(s)

P274 Wash hands thoroughly after handling

P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell

Supplemental Hazard information (EU) EUH032 Contact with acids liberates very toxic gas

2.3 Other hazards:

This product contains ammonium dichromate which is included in the list of substances included in Annex XIV of REACH – the "Authorisation List" as a substance of Very High Concern (SVHC) according to Regulation (EC) No. 1907/2006 (REACH).

This product is not identified as a PBT/vPvB substance

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

CAS No.	EC No.	Index No.	Classification	Concentration			
Potassium ferricyanide							
13746-66-2	237-323-3	n/a	EUH032	<10%			
Ammonium dichromate							
7789-09-5	232-143-1	024-003-00-1	Ox. Sol. 2; Acute Tox. 3; Acute Tox. 4; Skin Corr. 1B; Skin Sens. 1; Acute Tox. 2; Resp. Sens. 1; Muta. 1B; Carc. 1B; Repr. 1B; STOT RE 1; Aquatic Acute 1; Aquatic Chronic 1; H272, H301, H312, H314, H317, H332, H334, H340, H350, H360FD, H372, H400, H410	<0.1%			
Ferric Ammonium Oxalate							
13268-42-3	220-952-2	607-007-00-3	Acute Tox.4 H302, H312	<30%			

For the full text of the H-Statements mentioned in this Section, see Section 16

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

If inhaled

If vapour or mists are breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and water. If irritation persists, seek further medical attention.

In case of eye contact

Rinse thoroughly with plenty of water for at least 15 minutes. Take care not to wash the chemical from one eye to the other. If irritation persists, seek further medical attention.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. and seek immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed

The product when properly handled is not dangerous for the human health. Harmful effects are expected only in case of misuse.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

This product is not combustible. Use media such as alcohol/aqueous foam, dry chemical, or carbon dioxide or water spray/fog which is suitable and appropriate for any surrounding fire.

Unsuitable extinguishing media

None.

5.2 Special hazards arising from the substance or mixture

Highly dependent on combustion conditions. May produce decomposition fumes and combustion products if involved in a fire.

5.3 Advice 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. Use water fog to disperse vapours and leaks that have not ignited. Prevent runoff from fire control from entering waterways. Large fires should only be dealt with by trained personnel.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use suitable personal protective equipment (refer to Section 8 for details). Avoid breathing vapours or mists. Ensure adequate ventilation.

6.2 Environmental precautions

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

6.3 Methods and materials for containment and cleaning up

Absorb in inert material such as sand or non-combustible granules. Scoop up and place in a plastic container and dispose of in a manner consistent with applicable regulations.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.

7.2 Conditions for safe storage, including any incompatibilities

Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Do not store near acids.

7.3 Specific end use(s)

No data available

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Components with occupational exposure limits

Component	CAS No.	Reference period	Exposure Limit	Basis
Potassium ferricyanide	13746-66-2	8hr TWA	5 mg/m ³	EH40 WEL (Sk)
Ammonium dichromate	7778-50-9	8hr TWA	0.05 mg/m ³	EH40 WEL (Carc, Sen, BMGV)
Ferric Ammonium Oxalate	13268-42-3	8hr TWA	1 mg/m ³	

8.2 Exposure controls

Appropriate engineering controls

Use in well ventilated areas. Use mechanical ventilation in poorly ventilated areas.

Personal protective equipment

Eye/face Protection

Use equipment for eye protection tested and approved under appropriate standards such as EN 166.

Skin Protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with good practices. Wash and dry hands. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Recommended glove types include Nitrile, Polythene, and PVC gloves.

Body Protection

Wear suitable overalls or apron and change if contaminated.

Respiratory Protection

Where risk assessment in accordance with the hierarchy of controls established within the Chemical Agents Directive shows a requirement for respirators as a means of control, use a particulate filter type P.

Environmental exposure controls

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

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a) Appearanceb) OdourBlue liquidNone

c) Odour Threshold no data available

d) pH

e) Melting point/freezing point no data available

f) Initial boiling point >100 ℃

g) Flash point no data available h) Evaporation rate no data available Flammability (liquid) Non Flammable Upper/lower flammability or explosive limits no data available Vapour pressure no data available Vapour density no data available m) Relative density no data available n) Water solubility Fully miscible in water o) Partition coefficient (n- octanol/water) no data available no data available p) Auto-ignition temperature q) Decomposition temperature no data available

r) Viscosity no data available
 s) Explosive properties None
 t) Oxidizing properties None

9.2 Other safety information

No data available

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No data available on mixture.

10.2 Chemical stability

Expected to be stable at normal temperatures and under recommended storage conditions.

10.3 Possibility of hazardous reactions

Contact with acids may release hydrogen cyanide gas.

10.4 Conditions to avoid

Avoid contact with acids. High temperature (>50 °C), sources of ignition & direct sunlight.

10.5 Incompatible materials

Acids, strong bases and oxidising agents.

10.6 Hazardous decomposition products

No hazardous decomposition products when stored and handled correctly.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

LD₅₀ (oral) 300 - <2000 mg/Kg

Skin corrosion/irritation

No data available on mixture. Not expected to cause any acute skin corrosion or irritation.

Serious eye damage/eye irritation

No data available on mixture. Not expected to cause any acute eye damage or primary irritation; mild reversible eye irritation may be possible following exposure.

Respiratory or skin sensitisation

No known sensitisation potential.

Germ cell mutagenicity

No known mutagenic potential.

Carcinogenicity

IARC: No component of this product present at levels greater than or equal to 0.1% is

identified as probable, possible or confirmed human carcinogen by IARC.

SECTION 11: TOXICOLOGICAL INFORMATION (Continued)

Reproductive toxicity

No known toxic to reproduction potential.

Specific target organ toxicity - single exposure

No data available on mixture. Inhalation of significant vapours or mists may cause transient respiratory irritation.

Specific target organ toxicity - repeated exposure

No data available.

Aspiration hazard

No data available on mixture. Not expected to pose an aspiration hazard.

Potential health effects

Inhalation Excessive inhalation of vapours, aerosols or mists may cause transient

respiratory tract irritation.

Ingestion Harmful if swallowed.

Skin May cause mild skin irritation

Eyes May cause mild eye irritation.

Signs and Symptoms of Exposure

Ingestion may cause nausea and severe gastro-intestinal pain. May cause mild irritation to the respiratory tract, eyes and skin. Symptoms may include inflammation of the mucous membranes and upper respiratory tract, coughing, wheezing, shortness of breath. To the best of our knowledge, the chemical, physical, and toxicological properties of this mixture have not been thoroughly investigated.

Additional Information

Uncontrolled mixing with acids may release highly toxic cyanide gas.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

No expected to be harmful to aquatic life.

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available. Not expected to bioaccumulate.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available. Will not meet PBT or vPvB criteria.

12.6 Other adverse effects

No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

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.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number

ADR/RID: - not applicable IMDG: - not applicable IATA: - not applicable

14.2 UN proper shipping name

ADR/RID: Not dangerous goods IMDG: Not dangerous goods IATA: Not dangerous goods

SECTION 14: TRANSPORT INFORMATION (Continued)

14.3 Transport hazard class(es)

ADR/RID: - not applicable IMDG: - not applicable IATA: - not applicable

14.4 Packaging group

ADR/RID: - not applicable IMDG: - not applicable IATA: - not applicable

14.5 Environmental hazards

ADR/RID: no IMDG Marine Pollutant: no IATA: no

14.6 Special precautions for user

no data available

SECTION 15: REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

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)

15.2 Chemical Safety Assessment

No data available.

SECTION 16. OTHER INFORMATION

Further information

Text of H-statements mentioned in Section 3

H272 May intensify fire; oxidizer

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

H318 Causes serious eye damage

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

H400 Very toxic to aquatic life

H410 Very toxic to aquatic life with long-lasting effects

EUH032 Contact with acids liberates very toxic gas

Recommended restrictions on use

Use in accordance with manufacturer's technical instructions.

Revision history

Amendment to the original SDS dated 20/8/2013 to align SDS with requirements of alterations to safety data sheet layout in accordance with changes to EC1907/2006 (REACH) amendments and removal of references to SI:2009/716 (CHIP).

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.