



SAFETY DATA SHEET

A MIXTURE O~. THIOBIS(4,1-PHENYLENE)-S,S,S',S'-TETRAPHENYLDISULFONIUM BISHEXAFLUOROPHOSPHATE DIPHENYL(4-PHENYLTHIOPHENYL)SULFONIUM HEXAFLUOROPHOSPHATE PROPYLENE CARBONATE

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

1.1. Product identifier

Product name	A MIXTURE O~. THIOBIS(4,1-PHENYLENE)-S,S,S',S'-TETRAPHENYLDISULFONIUM BISHEXAFLUOROPHOSPHATE DIPHENYL(4-PHENYLTHIOPHENYL)SULFONIUM HEXAFLUOROPHOSPHATE PROPYLENE CARBONATE
Product number	3583
Synonyms; trade names	CPI 6992-EUROPE,CYRACURE PHOTOINITIATOT UVI-6992,UNICURE 6992
CAS number	74227-35-3
EU index number	016-087-00-3
EC number	403-490-8

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

Identified uses	photographic chemical
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1.3. Details of the supplier of the safety data sheet

Supplier	Univar Aquarius House 6 Mid Point Business Park Bradford BD3 7AY +44 1274 267300 sds@univar.com +44 1274 267306
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1.4. Emergency telephone number

Emergency Contact Number (Office Hours)	+44 1274 267346
Emergency Contact Number (Outside Office Hours)	+441865 407333
Sds No.	3583

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification

Physical hazards	Not Classified
Health hazards	Eye Irrit. 2 - H319 Skin Sens. 1 - H317
Environmental hazards	Aquatic Acute 1 - H400 Aquatic Chronic 1 - H410

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Classification (67/548/EEC or 1999/45/EC) R43 Xi;R36 N;R50/53

Environmental The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

2.2. Label elements

EC number 403-490-8

Pictogram



Signal word Warning

Hazard statements
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.

Precautionary statements
P261 Avoid breathing dust/fume/gas/mist/vapours/spray.
P273 Avoid release to the environment.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352 IF ON SKIN: Wash with plenty of water.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P313 Get medical advice/attention.
P391 Collect spillage.

2.3. Other hazards

None.

SECTION 3: Composition/information on ingredients

3.1. Substances

Product name	A MIXTURE O~. THIOBIS(4,1-PHENYLENE)-S,S,S',S'-TETRAPHENYLDISULFONIUM BISHEXAFLUOROPHOSPHATE DIPHENYL(4-PHENYLTHIOPHENYL)SULFONIUM HEXAFLUOROPHOSPHATE PROPYLENE CARBONATE
EU index number	016-087-00-3
CAS number	74227-35-3
EC number	403-490-8
Composition comments	The data shown are in accordance with the latest EC Directives.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation	Move affected person to fresh air at once. Get medical attention.
Ingestion	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Rinse mouth thoroughly with water. Give plenty of water to drink. Get medical attention if any discomfort continues.

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Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if any discomfort continues.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes. Get medical attention immediately. Continue to rinse.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation	Irritation of nose, throat and airway.
Ingestion	May cause discomfort if swallowed.
Skin contact	May cause sensitisation by skin contact.
Eye contact	Irritation of eyes and mucous membranes.

4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	No specific recommendations. If in doubt, get medical attention promptly.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog.
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5.2. Special hazards arising from the substance or mixture

Specific hazards	Oxides of the following substances: Carbon. Nitrogen. Sulphur. Phosphorus. Hydrogen fluoride (HF).
Hazardous combustion products	Oxides of carbon. Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

5.3. Advice for firefighters

Protective actions during firefighting	Contain and collect extinguishing water. Do not use water jet as an extinguisher, as this will spread the fire.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions	Follow precautions for safe handling described in this safety data sheet. Avoid inhalation of spray mist and contact with skin and eyes. Provide adequate ventilation.
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6.2. Environmental precautions

Environmental precautions	Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.
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6.3. Methods and material for containment and cleaning up

Methods for cleaning up	Absorb spillage with inert, damp, non-combustible material. Flush contaminated area with plenty of water. Collect and place in suitable waste disposal containers and seal securely. For waste disposal, see Section 13.
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6.4. Reference to other sections

Reference to other sections	Wear protective clothing as described in Section 8 of this safety data sheet.
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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Avoid spilling. Avoid contact with skin and eyes. Keep away from heat, sparks and open flame. Avoid inhalation of vapours and spray/mists. Provide adequate ventilation.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place.

Storage class Chemical storage.

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Ingredient comments No exposure limits known for ingredient(s).

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Avoid inhalation of vapours. Observe any occupational exposure limits for the product or ingredients.

Eye/face protection

The following protection should be worn: Chemical splash goggles.

Hand protection

It is recommended that gloves are made of the following material: Rubber (natural, latex). The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material.

Other skin and body protection

Wear rubber apron. Wear rubber footwear.

Hygiene measures

Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes wet or contaminated. Wash promptly with soap and water if skin becomes contaminated. Eating, smoking and water fountains prohibited in immediate work area.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance Liquid.

Colour Light (or pale). Yellow. to Amber.

Odour Mild.

Initial boiling point and range >220°C @

Flash point >140°C CC (Closed cup).

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Upper/lower flammability or explosive limits Lower flammable/explosive limit: 2.3

Vapour pressure <0.03 mm Hg @ °C

Vapour density >1

Relative density 1.3 - 1.4 @ 25°C

Solubility(ies) Insoluble in water.

Partition coefficient : 2.67 - 4.08

9.2. Other information

Other information Not determined.

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity There are no known reactivity hazards associated with this product.

10.2. Chemical stability

Stability Stable at normal ambient temperatures and when used as recommended.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Not determined.

10.4. Conditions to avoid

Conditions to avoid Avoid excessive heat for prolonged periods of time. Avoid heat, flames and other sources of ignition. Protect from sunlight. Ultraviolet light. Fluorescent light

10.5. Incompatible materials

Materials to avoid Strong mineral acids.

10.6. Hazardous decomposition products

Hazardous decomposition products Oxides of the following substances: Carbon. Nitrogen. Sulphur. Phosphorus. Hydrogen fluoride (HF).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀ mg/kg) 2,000.0

Species Rat

Inhalation Irritating to respiratory system.

Ingestion Gastrointestinal symptoms, including upset stomach.

Skin contact Liquid may irritate skin. May cause sensitisation by skin contact. May cause skin irritation/eczema.

Eye contact Irritating to eyes.

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Target organs Eyes Skin

SECTION 12: Ecological Information

Ecotoxicity The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

12.1. Toxicity

Toxicity Very toxic to aquatic organisms.

12.2. Persistence and degradability

Persistence and degradability The product is not readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

Partition coefficient : 2.67 - 4.08

12.4. Mobility in soil

Mobility The product is insoluble in water.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment No information available.

12.6. Other adverse effects

Other adverse effects Not determined.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

General information Do not puncture or incinerate, even when empty. Waste is classified as hazardous waste. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

SECTION 14: Transport information

General Wear protective clothing as described in Section 8 of this safety data sheet.

14.1. UN number

UN No. (ADR/RID) 3082

UN No. (IMDG) 3082

UN No. (ICAO) 3082

14.2. UN proper shipping name

Proper shipping name (ADR/RID) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (O~. THIOBIS(4,1-PHENYLENE)-S,S,S',S'-TETRAPHENYLDISULFONIUM BISHEXAFLUOROPHOSPHATE DIPHENYL(4-PHENYLTHIOPHENYL)SULFONIUM HEXAFLUOROPHOSPHATE)

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BISHEXAFLUOROPHOSPHATE DIPHENYL(4-PHENYLTHIOPHENYL)SULFONIUM
HEXAFLUOROPHOSPHATE PROPYLENE CARBONATE**

Proper shipping name (IMDG) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (O~. THIOBIS(4,1-PHENYLENE)-S,S,S',S'-TETRAPHENYLDISULFONIUM BISHEXAFLUOROPHOSPHATE DIPHENYL(4-PHENYLTHIOPHENYL)SULFONIUM HEXAFLUOROPHOSPHATE)

Proper shipping name (ICAO) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (O~. THIOBIS(4,1-PHENYLENE)-S,S,S',S'-TETRAPHENYLDISULFONIUM BISHEXAFLUOROPHOSPHATE DIPHENYL(4-PHENYLTHIOPHENYL)SULFONIUM HEXAFLUOROPHOSPHATE)

Proper shipping name (ADN) ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (O~. THIOBIS(4,1-PHENYLENE)-S,S,S',S'-TETRAPHENYLDISULFONIUM BISHEXAFLUOROPHOSPHATE DIPHENYL(4-PHENYLTHIOPHENYL)SULFONIUM HEXAFLUOROPHOSPHATE)

14.3. Transport hazard class(es)

ADR/RID class 9

ADR/RID subsidiary risk

ADR/RID label 9

IMDG class 9

IMDG subsidiary risk

ICAO class/division 9

ICAO subsidiary risk

Transport labels



14.4. Packing group

ADR/RID packing group III

IMDG packing group III

ICAO packing group III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant



14.6. Special precautions for user

EmS F-A, S-F

Emergency Action Code •3Z

Hazard Identification Number (ADR/RID) 90

Tunnel restriction code (E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

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HEXAFLUOROPHOSPHATE PROPYLENE CARBONATE**

Transport in bulk according to Not applicable.
Annex II of MARPOL 73/78
and the IBC Code

SECTION 15: Regulatory information

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

National regulations	The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (SI 2009 No. 716).
EU legislation	Dangerous Preparations Directive 1999/45/EC.
Guidance	CHIP for everyone HSG228. Workplace Exposure Limits EH40. Safety Data Sheets for Substances and Preparations. Approved Classification and Labelling Guide (Sixth edition) L131. DSEAR

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision comments	NOTE: Lines within the margin indicate significant changes from the previous revision.
Revision date	03/07/2014
Revision	01
SDS number	3583
SDS status	Approved.
Signature	Jitendra Panchal
Risk phrases in full	R36 Irritating to eyes. R43 May cause sensitisation by skin contact. R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Hazard statements in full	H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H400 Very toxic to aquatic life. H410 Very toxic to aquatic life with long lasting effects.