

**1. IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY**

Product name: Saturable Absorber 580  
 Product Number: 05800  
 Product use: For laboratory research purposes  
 Restrictions on use: Not for drug or household use  
 Safety Sheet Supplier: Oakley, Inc.  
 4000 Luxottica Place  
 Mason, OH 45040  
 USA  
 Telephone: (614) 492-5610  
 Emergency Phone: (614) 674-4846  
 E-mail address: info.exciton@luxotticaretail.com

**2. HAZARDS IDENTIFICATION**

**Classification of the substance or mixture**

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)  
 Skin irritation (Category 2), H315  
 Eye irritation (Category 2A), H319  
 Specific target organ toxicity - single exposure (Category 3), Respiratory system, H335

**Label elements**

Pictogram



Signal word

Warning

Hazard statement(s)

H315 Causes skin irritation.  
 H319 Causes serious eye irritation.  
 H335 May cause respiratory irritation.

Precautionary statement(s)

P261 Avoid breathing dust.  
 P264 Wash skin thoroughly after handling.  
 P271 Use only outdoors or in a well-ventilated area.  
 P301 + P312 IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell.  
 P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
 P304 + P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER or doctor/ physician if you feel unwell.
P321	Specific treatment (see supplemental first aid instructions on this label).
P330	Rinse mouth.
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/ attention.
P362	Take off contaminated clothing and wash before reuse.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/ container to an approved waste disposal plant.

**Hazards not otherwise classified or not covered by GHS**

None

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Synonyms:	1 H-Benzo[ij]quinolizinium,9-[(3-ethyl-2(3H)-benzothiazolydene)ethylidene]-2,3,5,6,7,9-hexahydro-, iodide
Formula:	C <sub>23</sub> H <sub>25</sub> N <sub>2</sub> S·I
Molecular Weight:	488.43 gm/mol
CAS-No.:	136282-93-4
EC-No.:	Not available

**Hazardous components**

1 H-Benzo[ij]quinolizinium,9-[(3-ethyl-2(3H)-benzothiazolydene)ethylidene]-2,3,5,6,7,9-hexahydro-, iodide  
Skin Irrit. 2; Eye Irrit. 2A; STOT SE 3; H315, H319, H335

**4. FIRST AID MEASURES****If inhaled**

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

**In case of skin contact**

Wash off with soap and plenty of water. . Consult a physician.

**In case of eye contact**

Flush eyes with water for 15 minutes as a precaution. . Consult a physician.

**If swallowed**

Never give anything by mouth to an unconscious person. Rinse mouth with water. . Consult a physician.

**Most important symptoms and effects, both acute and delayed**

No further relevant information available

**Indication of any immediate medical attention and special treatment needed**

No further relevant information available

**5. FIRE-FIGHTING MEASURES****Suitable extinguishing media**

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

**Special hazards arising from the substance or mixture**

Carbon oxides, nitrogen oxides (NO<sub>x</sub>), Sulphur oxides, Hydrogen iodide

**Special protective equipment for fire-fighters**

Wear self-contained breathing apparatus for fire-fighting if necessary.

**6. ACCIDENTAL RELEASE MEASURES**

**Personal precautions**

Wear personal protective equipment. Avoid dust formation. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.

**Environmental precautions**

Prevent further leakage of spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

**Methods and materials for containment and cleaning up**

Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

**7. HANDLING AND STORAGE****Precautions for safe handling**

Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

**Conditions for safe storage**

Keep container tightly closed in a dry and well-ventilated place. Light sensitive. Store in a dry place.

**8. EXPOSURE CONTROLS / PERSONAL PROTECTION**

Contains no substances with occupational exposure limit values.

**Hygiene measures and engineering controls**

Adequate ventilation and/or containment in accordance with good laboratory practices.

**Personal protective equipment****Respiratory protection**

Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN 143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

**Hand protection**

Handle with impermeable 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 applicable laws and good laboratory practices. Wash and dry hands.

**Eye / face protection**

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

**Body protection**

Use impervious clothing. Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

a) Appearance	Form: crystalline Color: Blue to green
b) Odor	No data available
c) Odor Threshold	No data available
d) pH	No data available
e) Melting point	No data available
f) Initial boiling point and boiling range	No data available

g) Flash point	No data available
h) Evaporation rate	No data available
i) Flammability	No data available
j) Upper/lower flammability or explosive limits	No data available
k) Vapor pressure	No data available
l) Vapor density	No data available
m) Relative density	No data available
n) Solubility	No data available
o) Partition coefficient: n-octanol/water	No data available
p) Auto-ignition temperature	No data available
q) Decomposition temperature	No data available
r) Viscosity	No data available

## 10. STABILITY AND REACTIVITY

a) Reactivity	No data available
b) Chemical stability	Stable under recommended storage conditions
c) Possibility of hazardous reactions	No data available
d) Conditions to avoid (e.g. static discharge)	No data available
e) Incompatible materials	Strong oxidizing agents
f) Hazardous decomposition products	See Section 5.

## 11. TOXICOLOGICAL INFORMATION

### Acute toxicity

No data available

### Skin corrosion/irritation

Causes skin irritation.

### Serious eye damage/eye irritation

Causes serious eye irritation.

### Respiratory or skin sensitization

No data available

### Germ cell mutagenicity

No data available

### 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.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

### Reproductive toxicity

No data available

**Routes of Exposure:** Inhalation, Eye contact, Ingestion, Skin contact.

### Specific target organ toxicity - single exposure

Inhalation - May cause respiratory irritation  
Causes skin irritation.  
Causes serious eye irritation.

**Specific target organ toxicity - repeated exposure**

No data available

**Aspiration hazard**

No data available

**Signs and Symptoms of Exposure**

Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

**Additional Information**

No additional information

**12. ECOLOGICAL INFORMATION**

**Toxicity**

No data available

**Persistence and degradability**

No data available

**Bioaccumulative potential**

No data available

**Mobility in soil**

No data available

**PBT and vPvB assessment**

No data available

**Other adverse effects**

No data available.

**13. DISPOSAL CONSIDERATIONS**

**Product**

Offer surplus and non-recyclable solutions to a licensed disposal company.

**Contaminated packaging**

Dispose of as unused product.

**14. TRANSPORT INFORMATION**

**DOT (US)**

Not dangerous goods

**IMDG**

Not dangerous goods

**IATA**

Not dangerous goods

**15. REGULATORY INFORMATION**

**SARA 302 Components**

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 313 Components**

SARA 313: This material does not contain any chemical components with known CAS numbers that exceed the threshold (de Minimis) reporting levels established by SARA Title III, Section 313.

**SARA 311/312 Hazards**

Acute Health Hazard

**Massachusetts Right To Know Components**

No components are subject to the Massachusetts Right to Know Act.

**Pennsylvania Right To Know Components**

No components are subject to the Pennsylvania Right to Know Act.

**New Jersey Right To Know Components**

No components are subject to the New Jersey Right to Know Act.

**California Prop. 65 Components**

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

**16. OTHER INFORMATION****HMIS Rating**

Health hazard:	2
Chronic Health Hazard:	
Flammability:	0
Physical Hazard:	0

**NFPA Rating**

Health hazard:	2
Fire Hazard:	0
Reactivity Hazard:	0

**Further information**

Copyright 2018 Oakley, Inc. License granted to make unlimited paper copies for internal use only. The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Oakley, Inc. shall not be held liable for any damage resulting from handling or from contact with the above product.

**Revised Date: December 13, 2018**