



# Optic care and MSDS information

## Frequently asked questions

### General rules about cleaning lenses/mirrors

- Always wear finger cots when handling any lens or mirror to keep finger oils off of the optic.
- Always handle optics by the edge of the optic. Never touch the coated surfaces.
- Never rub an optical surface, as this can mar or scratch the coated surface.
- Avoid using Q-tips or cotton balls to clean an optical surface.
- Use a high-grade acetone to clean your optic, which should be dispensed by an eyedropper on to lens cleaning tissue.
- Never put any foreign objects back into the acetone dispenser to avoid contamination of the acetone in the dispenser.

### How to clean an optic

Pull out your mirror/lens from its holder and lay it on a clean work area, or into a holder supplied by the manufacturer. You will need a lens cleaning tissue containing low ash content and no chemical additives. Also, you will need a small dispense bottle which has an eyedropper to apply the acetone.

- If you do not have an optic holder, lay your optic onto a clean piece of lens tissue.
- Remember that when lens tissue is dry it is abrasive and can scratch your optical surface.
- Place a new piece of lens tissue over the optic, completely covering the optic.
- Fill your eyedropper with 6–8 drops of acetone. You do not want to apply too much.
- Drip acetone onto the center of the optic until it is saturated to the outside diameter of the optic.
- Pull the lens tissue slowly across the optic. You will know if you are going too fast if you see residue left behind. At the correct speed, the acetone will evaporate as you drag the tissue across the lens. (If residue remains, you moved too quickly).



- Repeat this process until you see a clean optical surface, with no marks or smudges. Always use a new piece of lens tissue each time to keep contaminants off of the optic you are cleaning.
- If after repeated cleaning of the optical surface you still see any spots, pits, or scratches, determine whether or not to replace the optic with a new optic.
- Replace your optics as soon as possible to keep any airborne particles from getting on the optic.

### Disposal of an optic

It is important to dispose of used laser optics at a licensed industrial waste facility, which is in compliance with all local, state, and federal regulations. If you do not have access to a licensed industrial waste facility, and purchased your laser optics through Centricut, you may return them to Centricut for proper disposal. This service is provided to our valued customers only. All returns must include return authorization and invoice numbers. In order to minimize any hazards, optics must be in a sealed plastic bag. Acceptance of goods will be refused if it is not packaged correctly, or if it does not contain a return authorization number.

## II VI MSDS and instructions

Trade name: Zinc Selenide (ZnSe)

Synonyms: Raytran ZnSe, Kodak Irtan-4

Form: Solid Optical Element

Chemical family: Inorganic chemical belonging to the II-VI group of periodical systems of elements.

CAS #: 1315-09-9

[Download MSDS](#)

Instructions for cleaning up broken or burnt ZnSe Optics

[Download instructions](#)

## Ophir MSDS and instructions

Name of product: ZnSe lenses for high power CO<sub>2</sub> lasers (DuralensT)

Identification code: These lenses will be recognized by p/n with 5 to 7 numbers and the letter LA which means Low Absorption.

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Name of product: ZnSe lenses for high power CO<sub>2</sub> lasers (Black MagicT)

Identification code: These lenses will be recognized by p/n with 5 to 7 numbers and the letter LA which means Low Absorption.

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Trade name: Copper Synonym: Copper metal

Chemical nature: Metallic Element Formula: Cu

CAS #: 7440-50-8 Formula Weight: 63.55

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Trade name: Silicon Synonym: None Known

Chemical family: Non-metal Molecular Formula: Si

CAS #: 744m0-21-3

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EZ Clean – Wipes for lens cleaning

[Download instructions](#)

Contact Hypertherm to locate a distributor near you.

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One of Hypertherm's long-standing core values is a focus on minimizing our impact on the environment. Doing so is critical to our, and our customers' success. We are always striving to become better environmental stewards; it is a process we care deeply about.

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