# EE-3310 and EE-3320: first choice for wiping/cleaning lenses and other precision optical components

Top quality cleaning liquid for optical components

# HYPER CLEAN EE-3310

Setting the standard in its field, EE-3310 is ideal for finish cleaning applied to lenses, prisms, mirrors, and other precision optical components as well as glass products. Its safe and excellent performance makes it the preferred choice of optical companies' production sites and component inspection/maintenance services.



High performance with complete safety on plastics

# HYPER CLEAN EE-3320

This product is carefully formulated to clean plastic materials while avoiding any degradation of their surface. It is also suitable for use on materials such as acrylic, which are vulnerable to corrosion or surface cracking on contact with alcohol-based cleaning products.



Handy aerosol type, always ready for immediate use

# HYPER CLEAN 3310

Convenient and easy to use, the aerosol type EE-3310 is suitable for inspection and cleaning of microscopes, and optical measuring equipment, as well as for maintaining commonly used business imaging equipment such as and OA equipment, cameras and VTRs. This product is also ideal for cleaning everyday tems such as cameras, binoculars and



# EE-6310: recommended for wider applications from electronic/electric equipment to metal and glass

Superb quality wipe-on cleaning liquid with all-round performance

# HYPER CLEAN EE-6310

This all-round wipe-on cleaning liquid makes short work of a wide variety of stains and dirt, and dries completely in seconds. Its superb quality finish satisfies a wide range of business and manufacturing needs, from electric/electronic components to metal and optical components, and maintenance, inspection and cleaning of precision equipment.



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Convenient aerosol type for a range of inspection and cleaning tasks

## HYPER CLEAN 6310

This aerosol version of EE-6310 is convenient to use and easy to carry. It is especially suitable for application to tough greasy dirt in the working parts of machinery or for cleaning flux from electric substrate. Also handy for checking cleanliness and operability of on-site equipment, and carrying out



### **■ HYPER CLEAN SPECIFICATIONS**

	HYPER CLEAN EE-3310	HYPER CLEAN EE-3320	HYPER CLEAN EE-6310
Major constituents	Silicone solvent/ethyl alcohol	Silicone solvent	Carbon hydride/ethyl alcohol
Appearance	Clear and colorless	Clear and colorless	Clear and colorless
Odor	Slight	Slight	Slight
Boiling point (°C)	72	100	58
Specific gravity (25°C)	0.77	0.76	0.67
Viscosity (mm²/s)	0.8	0.65	0.51
Surface tension (N/m)	16 × 10 <sup>-3</sup>	16 × 10 <sup>-3</sup>	17.5 × 10 <sup>-3</sup>
Flash point (°C)	0	-1	-28.5
Acute toxicity	Oral rat LD₅o Over 10g/kg	Oral rat LD₅o Over 10g/kg	Oral rat LD₅ Over 5g/kg
Fire defense law	Class 4, first petroleum Non water-soluble liquid	Class 4, first petroleum Non water-soluble liquid	Class 4, first petroleum Non water-soluble liquid
Ordinance on the prevention of organic solvent poisoning	Unaffected by the provisions of this ordinance	Unaffected by the provisions of this ordinance	Unaffected by the provisions of this ordinance
PRTR	Does not contain designated substances	Does not contain designated substances	
Packaging	5-liter metal can/18-liter pail UN can/100ml aerosol	5-liter metal can/18-liter pail UN can	5-liter metal can/18-liter pail UN can/190ml aerosol

<sup>\*</sup>Surface tension: 1dyne/cm=1×103N/m Viscosity: 1cst=1mm²/s PRTR: Pollutant Release and Transfer Register

Specifications are subject to change without any obligation on the part of the manufacturer

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By putting the human user first, Olympus has come up with a safe and effective cleaning liquid.

# **HYPER CLEAN**

# all-round cleaning with easy wipe-on application.

■ Olympus works to develop cleaning systems that are non-polluting. environmentally sustainable and completely free of chlorofluorocarbons (CFCs) and ethane, which the company eliminated from its products as far back as March 1993. The HYPER CLEAN series, which is safe for people and effective in action, was created through this development program.

■ The HYPER CLEAN series was created using the advanced cleaning technologies developed for the cleaning of Olympus' optical components, and for the finishing of precision components and equipment. HYPER CLEAN is a high quality cleaning liquid applied by wiping and demonstrates highly effective all-round performance. This performance has attracted widespread attention, for its superior cleaning ability on all kinds of surface, its removal of a very wide range of dirt and stains, as well as its exceptional safety for users and its nonpolluting, sustainable characteristics. The ecological HYPER CLEAN series is recommended as the ideal substitute for conventional wipe-on cleaner liquids containing ether, acetone, IPA or thinner.







•Suitable for a wide variety of applications, from finish

No harm to the ozone layer since chlorofluorocarbons

No corrosive or damaging effect on plastic, metal, glass

cleaning for high precision optical and electronic equipment to grease removal and component

The HYPER CLEAN Series — high performance cleaning liquid that's safe for people and causes no pollution. Check out the following outstanding features which Olympus experts developed and refined as actual users.

### All-round cleaning liquid **HYPER CLEAN series**

7 Major Features



### 1) Safety for people

- •Completely harmless and safe for humans to use.
- •Unaffected by the provisions of the ordinance on the prevention of organic solvent poisoning in Japan's Industrial Safety and Health Law.



#### 2) High quality finish

3 Fast drying action

Does not contain any nonvolatile matter, and leaves no

•Dries guickly, enabling speedy wipe-clean work.



residue after drying, guaranteeing a high quality finish.



#### **Excellent permeability**

and virtually all other materials.

4 Versatile usage

Pollution-free

maintenance.

are not used.

Corrosion

 Low viscosity and surface tension ensure effective penetration and cleaning even in the narrowest spaces. High quality, safe, wipe-on cleaning liquid with effective all-round performance in multiple situations. Isn't it time you changed to HYPER CLEAN?

### For cleaning common optical products

•Cleaning cameras, binoculars, telescopes



### For wipe cleaning optical components

- •Wiping finish for lens and prism
- •Cleaning finished glass products, optical fiber etc.
- •Cleaning optical pickups and sensors



#### For daily maintenance of optical and OA equipment

- •Cleaning microscopes, optical measuring instruments and projectors
- •Cleaning copying machines, fax machines and personal computers



### For cleaning and maintenance professionals

- •Maintenance and cleaning of automatic ticket checkers and ATMs
- •Inspection and cleaning of automatic dispensers



#### For wipe cleaning at production facilities

- •Cleaning plastic components or parts Wiping out flux from electric substrate
- •Cleaning ceramic components
- •Inspection and cleaning of OA equipment on the assembly line and before shipment



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	HYPER CLEAN EE-3310	HYPER CLEAN <b>EE-3320</b>	HYPER CLEAN EE-6310
Acrylic	Δ	0	0
Polycarbonate	0	0	0
Polystyrene	0	0	○~△*1
ABS	0	0	0
Ceramic	0	0	0
Glass	0	0	0
Metal	0	0	0

•Results from each test piece panel of individual tests. •Comparison of results (viewed with the naked eye and through a stereo microscope) after rubbing strongly and continuously (10 times), with each cleaning liquid in turn. •Please test before use, since some "attack" can occur depending on the plastic grade and molding conditions