



SAFETY DATA SHEET

2016-10-31

May be used to comply with OSHA's Hazard Communication Standard, 29 CFR 1910.1200. Standard must be consulted for specific requirements.

U.S. Department of Labor
Occupational Safety and Health Administration
(Non-Mandatory Form)
OMB No.1218-0072

§ 1 - IDENTITY INFORMATION

Product Name (as used on label and list) :

DO 455, DO 306, DO 206 **DUO BRUSH CLEANER**

Manufacturer : **HOLBEIN Works, Ltd.**

Address : 2-2-5, Ueshio, Chuo-ku, Osaka-shi
OSAKA 542-0064 JAPAN

Telephone Number for information : 81-6-6191-7722

Emergency Telephone Number : 81-72-985-1221

Preparer : **ALAKI, Yutaka**

§ 2 - HAZARD IDENTIFICATION

This product is water-based and not classified as dangerous for supply or conveyance.

Classification : Non-regulated

Danger : Not nonflammable, not explosive

Oral Effects : Category 5 (May be harmful if swallowed)

Eye Effects : Category 2 (Eye irritant)

Ecological consideration : Especially none



§ 3 - COMPOSITION / INGREDIENTS

Components (Specific Chemical Identity, Common Name(s), C.I. No) CAS. No.

Surfactant	—	Registered
Water Retainer	(Propylene Glycol)	57-55-6
Water *		7732-18-5

§ 4 - FIRST AID MEASURES

Eyes : In case of eye contact, rinse with plenty of water and if necessary consult an eye specialist.

Ingestion : In case of swallowing, drink plenty of water. Induce vomiting. If you feel unwell, seek medical advice.

Skin Contact : Upon skin contact, wash with plenty of water, soap or other non-irritating cleansing agents.

Inhalation : This product is not inhaled.

§ 5 - FIRE AND EXPLOSION HAZARD DATA

Flammability : Water-based product. Not flammable under normal condition.

Autoignition Temp.: N/A

Flash Point : 264°C (after dried)

Extinguishing Media : Water mist, Foam, Dry powder, CO₂

Unusual Fire and Explosion Hazards : Material will not support combustion

§ 6 - ACCIDENTAL RELEASE MEASURES

Take up with absorbent materials.

§ 7 - HANDLING AND STORAGE

Precautions to Be Taken in Handling and Storing :

Avoid prolonged or repeated contact with skin and eyes.

§ 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Special cautions are normally not necessary.

§ 9 - PHYSICAL / CHEMICAL CHARACTERISTICS

Appearance : Water white liquid
Volatile : Water
Odor : Own smell
Specific Gravity (H₂O = 1) : 1.05
Boiling Point : Approx. 100°C
Evaporation Rate : Slower than ether
pH : 4
Solubility in Water : ∞

§ 10 - HAZARD INFORMATION AND STABILITY

Stability : Stable under normal state
Reactivity : None
Incompatibility (Materials to Avoid) : None
Hazardous Decomposition or Byproducts : No thermal decomposition when stored and handled correctly.
Corrosive Behavior : No

§ 11 - TOXICOLOGICAL INFORMATION

Primary Routes of Entry : Dermal, eye contact, inhalation, swallowing
Oral Toxicity (LD₅₀): Above 63g/Kg (acute toxicity on swallowing / rats)
Noted that this product may be harmful if swallowed.
Effects of Acute Exposure : None known
Effects of Chronic Exposure : None known
Skin irritation : Non irritant (tested on rabbits)
Eye irritation : Irritant
Carcinogenicity : Not listed as carcinogen
Sensitization : Not expected
Mutagenicity : N/A
Teratogenicity : None known
Individual Information : See the table of Appendix.

§ 12 - ECOLOGICAL INFORMATION

Biological Elimination : COD value : 44 mg/g (Mn)
BOD value : 22 mg/g
Fish Toxicity : LC₅₀ : 60~125 100mg/L
Test Species : Killifish
Duration of Test : 48 hrs
Inhabitation of Activity of Waste Water Bacteria : --
Water Pollution Class (WGK) : --

§ 13 - DISPOSAL CONSIDERATIONS

Disposal Considerations : May be led to the drain.

§ 14 - TRANSPORT INFORMATION

Hazard Class : Non-regulated
UN number : N/A

§ 15 - REGULATORY INFORMATION

Conforms to ACMI, Art & Creative Materials Institute, under ASTM D 4236.

§ 16 - OTHER INFORMATION

Notice: The information of this sheet is based on the present state of our knowledge and does not therefore guarantee certain properties.

Appendix

DUO Brush cleaner is classified as CL product in the ACMI system.

AP	Approved Product :	Contain no materials in sufficient quantities to be toxic or injurious to humans.
CL	Cautionary Label :	Any known health risks and with information on the safe and proper use of these materials