



# CERTIFICATE

## TBT-Free Antifouling

**PPG Protective & Marine Coatings**

hereby declares that **SIGMA ECOFLEET 290 A**  
antifouling coating was applied on the underwater area of:

**MV HAPO-282** - IMO No. **8976231**

of **HAPO International Barges BV**

during Week 31, 2023 at Damen shipyard, in Schiedam, Netherlands.

**SIGMA ECOFLEET 290 A** is a TBT-free antifouling coating that complies with the terms of the IMO Convention on the Control of Harmful Antifouling Systems on Ships of 2001 (AFS/CONF/26).

**SIGMA ECOFLEET 290 A**, applied in the colour(s):

☐ Brown / ☒ Red-brown / ☐ Other:

is a one component, high performance TBT free self-polishing antifouling coating, containing the following active ingredients:

- |                                            |                    |
|--------------------------------------------|--------------------|
| ▪ Dicopper oxide                           | CAS no: 1317-39-1  |
| ▪ 4,5-Dichloro-2-octyl-2H-isothiazol-3-one | CAS no: 64359-81-5 |

The antifouling system was applied directly over:  
an existing tin-free antifouling system  
supplied by PPG Protective-Marine Coatings

PPG Protective & Marine Coatings cannot be held liable for any consequences arising out of or in connection with the information provided in this certificate.

**PPG Protective & Marine Coatings**

Ostrow, Poland

Date: 08-2023



**PPG Protective &  
Marine Coatings**

Bringing innovation to the surface.™