



# NIPPON KAIJI KYOKAI

## Certificate

OF

### TYPE APPROVAL

Certificate No.  
TA191038E(R)

Name of Product : Foam Concentrate  
Product name : MOUSSOL-APS MARINE 3/3 F-10 #3303  
Product descriptions : 3% mixing ratio type low expansion foam concentrate for deck foam system of oil tankers and chemical tankers as type A foam (alcohol-resistant foam) and type B foam (regular foam) as defined in Chapter 17 of IMO IBC Code.  
Expansion Ratio : 6 to 15 times  
Physical Properties : See Annex.  
Chemical Components : See Annex.  
Manufacturer : Fabrik chemischer Präparate von  
Dr. Richard Sthamer GmbH & Co. KG  
Liebigstrasse 5, 22113 Hamburg, Germany  
Testing standard : IMO MSC.1/Circ.1312  
Documentation : See Annex.

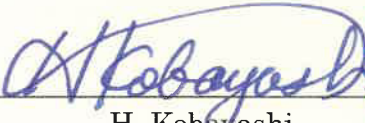
THIS IS TO CERTIFY that the above-mentioned foam concentrate has been approved by Nippon Kaiji Kyokai with type approval No. N-826, and that the products of the above type will be accepted for use onboard ships classed with the Society as complying with the relevant requirements of the Society's *Rules for the Survey and Construction of Steel Ships* and those of the *International Convention for the Safety of Life at Sea, 1974, as amended*, subject to conditional upon that product verification be carried out by the Society.

This certificate is valid until 28 September 2024.

Issued at Tokyo on 23 August 2019.

Initial approval date: 29 September 2004

NIPPON KAIJI KYOKAI

  
H. Kobayashi

General Manager

Material and Equipment Department



Note: This product may also be manufactured and distributed with following name.  
"MOUSSOL-APS 3/3"



### 1. Test Report

Test laboratory : MPA Dresden GmbH  
Report number : 20150559/Sth 216  
Issued date : 5 October 2015

### 2. Physical Properties

Density (20°C) : 1.03~1.07 g/ml  
Pour Point : Min. - 10°C  
pH value (20°C) : 6.5 ~ 8.5  
Sediment content (20°C) : None  
Viscosity : Thixotrope liquid  
Drainage time (25%) : Min. 4min.

### 3. Chemical Components

Hydrocarbon Surfactant :  $\leq 15\%$   
Fluoro Surfactants :  $\leq 6\%$   
Glycol/Glycolether :  $\leq 15\%$   
Polysaccharide :  $\leq 1.5\%$   
Water : The Rest

*~End of Certificate~*