



NIPPON KAIJI KYOKAI

Certificate

OF

TYPE APPROVAL

Certificate No.
TA18285E (N)

Name of Product	: High Expansion Foam Concentrate
Product name	: STHAMEX-SV 2% F-6 #9242
Descriptions	: 2% mixing ratio type high expansion air foam concentrate for fixed high expansion foam fire extinguishing systems
Expansion Ratio	: 500 to 1000 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/Circ.670
Documentation	: See Annex.
Limitation	: Foam system is to be complied with the requirements developed by IMO

THIS IS TO CERTIFY that the above-mentioned foam concentrate has been approved by Nippon Kaiji Kyokai with type approval No. N-1287, and that the products of the above type will be accepted for use onboard ships classed with the Society except Japanese flagged ships for compliance 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 21 March 2023.

Issued at Tokyo on 22 March 2018.

NIPPON KAIJI KYOKAI

H. Kobayashi
General Manager

Material and Equipment Department



Annex to the certificate No. TA18285E (N)



1. Test Report

Test laboratory : MPA Dresden GmbH
Report number : 20160853/Sth 226
Issued date : 10 August 2016

2. Physical Properties

Density (20°C) : 0.98 ~ 1.02 g/ml
Solidification point : Min. -6.0°C
pH value (20°C) : 6.5 ~ 8.5
Sediment content (20°C) : None
Viscosity : Max. 10 mm²/s (20°C)
Max. 20 mm²/s (0°C)
Max. 40 mm²/s (-6°C)

3. Chemical Components

1-BUTOXY-2-PROPANOL : < 25%
SODIUM-ALKYLEETHERSULFATE : < 10%
TRIETHANOLAMMONIUM-LAURYL SULFATE : < 10%
DODECANOL : < 5%
TETRADECANOL : < 5%
Water : The Rest

~End of Certificate~