

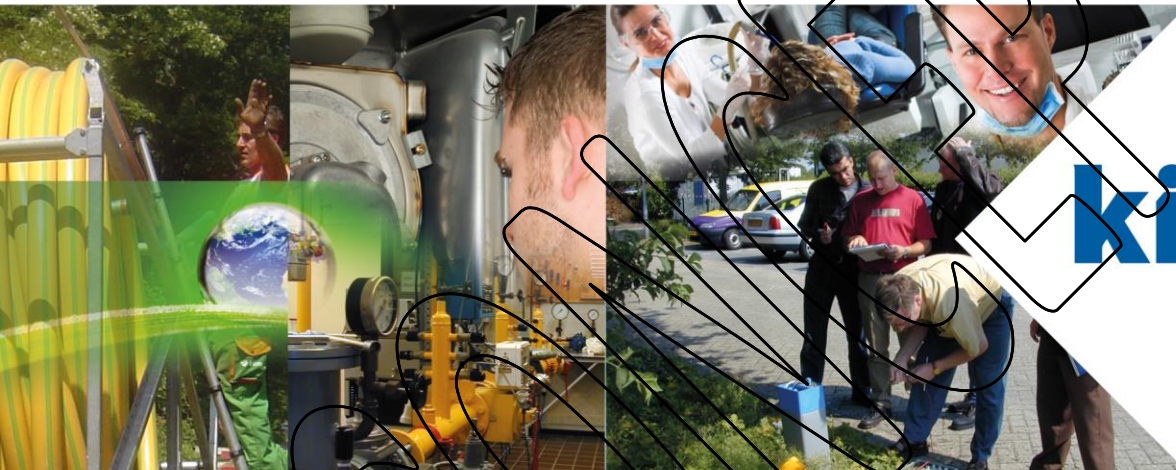
AR 120

Datum jiji-mm-dd

bindendverklaring

# Approval requirement 120

Foam producing solution for leak detection



**kiwa** 



**Trust  
Quality  
Progress**

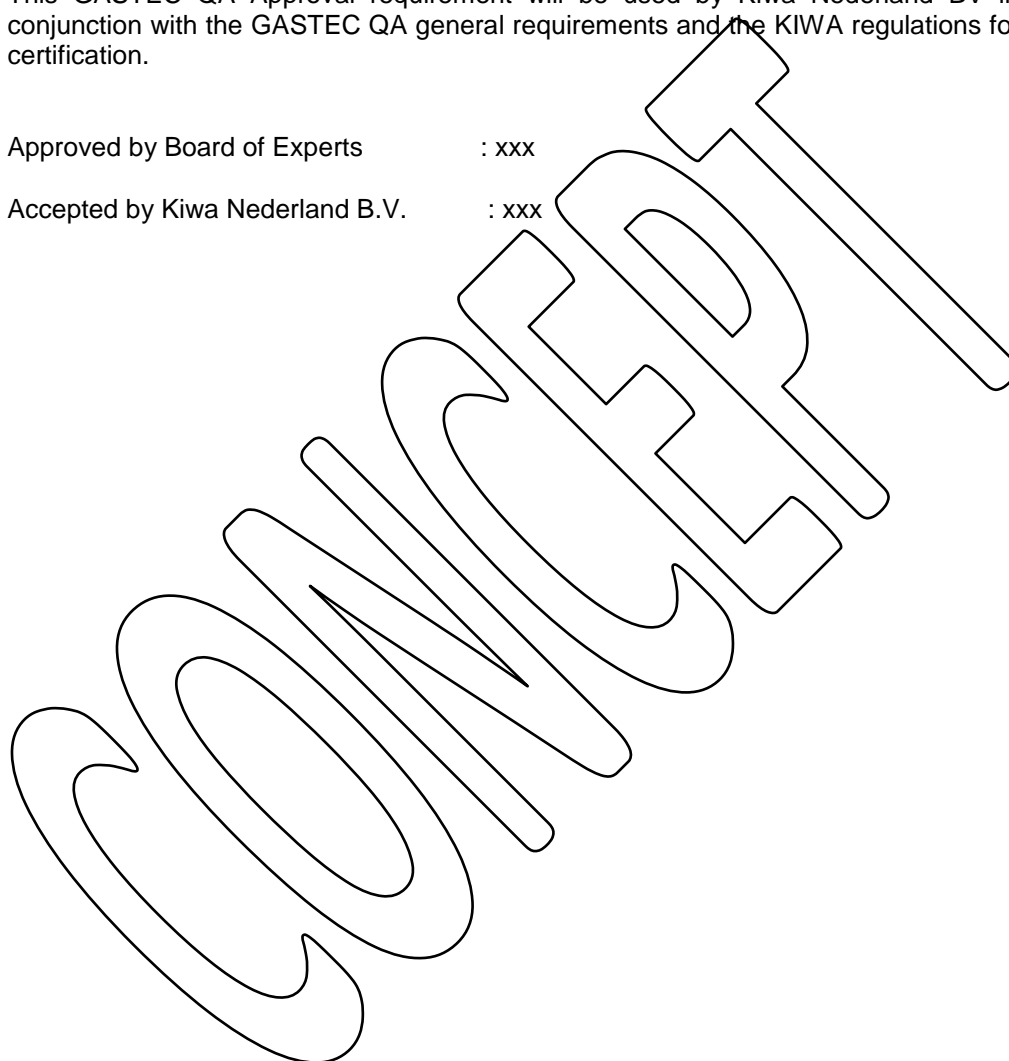
# Foreword

This GASTEC QA Approval requirement has been approved by the Board of Experts product certification GASTEC QA, in which relevant parties in the field of gas related products are represented. This Board of Experts supervises the certification activities and where necessary require the GASTEC QA Approval requirement to be revised. All references to Board of Experts in this GASTEC QA Approval requirement pertain to the above mentioned Board of Experts.

This GASTEC QA Approval requirement will be used by Kiwa Nederland BV in conjunction with the GASTEC QA general requirements and the KIWA regulations for certification.

Approved by Board of Experts : xxx

Accepted by Kiwa Nederland B.V. : xxx



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# 1 Introduction

## 1.1 General

This GASTEC QA approval requirement in combination with the GASTEC QA general requirements include all relevant requirements, which are adhered by Kiwa as the basis for the issue and maintenance of a GASTEC QA certificate for foam producing solution for leak detection.

This GASTEC QA Approval requirements replace the GASTEC QA Approval Requirements 120 "Schuimvormende lekzoekmiddelen, dated March 1996 and concept approval requirement 120, dated January 2016.

List of changes:

- Update to the new format for GASTEC QA approval requirements
- These approval requirements have been fully reviewed textually.
- All general requirements have been deleted and included in the GASTEC QA general requirements document
- Change of paragraphs
- Update of list of referenced documents
- Reference to EN 14291 is added
- Clause 4.4 from approval requirement 120, dated January 1996 is deleted
- New test method for clause 4.4 from approval requirement 120, dated January 1996

The product requirements are changed

## 1.2 Scope

These approval requirements specify the requirements for foam producing solution for leak detection for gas leaks on metal and plastic piping systems within a temperature range of 0 °C up to and including 50 °C and an operating pressure of 20 mbar up to and including 8 bar. These approval requirements are applicable on ready-made leak detection solutions.

## 2 Definitions

In this approval requirement, the following terms and definitions are applicable:

**Board of Experts:** The Board of Experts Gastec QA.

**Foam producing leak detection solution:** Aqueous solution with low surface tension, which indicates small gas leaks by formation of foam bubbles.

CONCEPT

## 3 Product requirements

### 3.1 General

The product shall comply with the requirements of EN 14291 "Foam producing solutions for leak detection on gas installations".

Contrary to EN 14291 the requirements for freezing point, clause 4.7, do not have to be met.

In addition to EN 14291, the following requirements shall be met:

### 3.2 Suitability for the use on plastic- and elastomeric materials.

In addition to EN 14291, clause 5.2, a report shall be available which proves that the leak detection solution do not have a negative influence on plastic- and elastomeric materials.

### 3.3 Infrared analyses

An initial infrared analyses shall be made of the leak detection solution. This analyses shall be used for comparing the compounds on each product verification.

## 4 Marking, instructions and packaging

### 4.1 Marking

In addition to EN 14291, clause 7, the product shall be marked with the GASTEC QA word mark or logo.

### 4.2 Instructions

In addition to EN 14291, clause 7, the supplier shall provide an instruction manual with the product. The instruction manual shall be written in the Dutch language, containing information that the product is GASTEC QA certified.

### 4.3 Packaging

The packaging of the product shall avoid contamination and damages from external influences.

CONCEPT

## 5 Quality system requirements

The supplier shall make a risk assessment of the product and production process according to chapter 3.1.1.1 and 3.1.2.1 of the GASTEC QA general requirements. The risk assessments shall be available to Kiwa for review.

CONCEPT



# 6 Summary of tests

This chapter contains a summary of tests to be carried out during:

- The initial product assessment;
- The periodic product verification;

## 6.1 Test matrix

Description of requirement	Clause (EN 14291)	Test within the scope of		
		Initial product assessment	Product verification	
			Verification	Frequency
Surface tension	4.1	X		
Foam stability	4.2	X	X	Once a year
Corrosiveness	4.3	X		
pH-value	4.4	X	X	Once a year
Compatibility with non-hardening sealing materials and lubricants	4.5	X		
Flammability	4.6	X		
Toxicological harmlessness	4.8	X		
Marking	7	X	X	Once a year
<b>Additional GASTEC QA requirements</b>				
Suitability on plastic- and elastomeric materials	3.2	X		
Infrared analyses	3.2	X	X	Once a year
Marking	4.1	X	X	Once a year
Instruction	4.2	X		
Packaging	4.3	X		

## 7 List of referenced documents and source

### 7.1 Standards / normative documents

All normative references in this Approval Requirement refer to the editions of the standards as mentioned in the list below.

EN 14291: 2004

Schuimvormende oplossingen voor lekdetectie op gasinstallaties

CONCEPT