

CLASSIFICATION OF REACTION TO FIRE PERFORMANCE IN ACCORDANCE WITH EN 13501-1:2018

Classification no.	2021-Efectis-R000509[Rev.7]
Sponsor	Kingspan Unidek BV Schieweg 26 5420 AC GEMERT THE NETHERLANDS
Product name	Unidek Aero - Unidek Aero Comfort – Unidek Aero Comfort Unidek Aero MB - Unidek Aero comfort MB - Unidek Aero Comfort MB Unidek Aero Light Unidek Aero Plus Unidek Special 025
Prepared by	Efectis Nederland BV
Notified body no.	1234
Author(s)	Tess van der Velden Job Onderwater. Bauke Knottnerus
Project number	ENL-21-000304 ENL-21-000506 ENL-23-000754 ENL-24-000123 ENL-24-000984 ENL-25-000851
Date of issue	December 2025
Original date of issue	April 2021
Number of pages	9

3. STANDARDS, RERTS, RESULTS AND CRITERIA IN SUPPORT OF THIS CLASSIFICATION

3.1 APPLICABLE (PRODUCT) STANDARDS

EN ISO 11925-2:2020	Reaction to fire tests - Ignitability of products subjected to direct impingement of flame - Part 2: Single-flame source test
EN 13823:2020+A1:2022	Reaction to fire tests for building products - Building products, excluding floorings exposed to the thermal attack by a single burning item
EN 13238:2010	Reaction to fire tests for building products - Conditioning procedures and general rules for selection of substrates
EN 13501-1:2018	Fire classification of construction products and building elements Part 1: Classification using data from reaction to fire tests

3.2 REPORTS

Name of Laboratories	Name of sponsor	Report ref. no.	Test method
Efectis Nederland BV THE NETHERLANDS	Kingspan Unidek BV THE NETHERLANDS	2021-Efectis-R000507[Rev.1]	EN ISO 11925-2:2020
		2021-Efectis-R000508[Rev.1]	EN 13823:2020
		2021-Efectis-R000858	EN 13823:2020
		2024-Efectis-R000392	EN 13823:2020+A1:2022
		2025-Efectis-R001209	EN 13823:2020+A1:2022

3.3 TEST RESULTS

3.3.1 Ignitability test results report 2021-Efectis-R000507[Rev.1]

Test method and test number	Parameter	No. tests	Results	
			Continuous parameter – maximum	Compliance with parameters
EN ISO 11925-2				
Surface flame impingement	Fs ≤150 mm	6	45	-
	Ignition of filter paper		-	Compliant
Edge flame Impingement	Fs ≤150 mm	6	30	-
	Ignition of filter paper		-	Compliant
Side flame Impingement EPS	Fs ≤150 mm	2	90	-
	Ignition of filter paper		-	Compliant

3.3.3 SBI test results report 2024-Efectis-R000392

Test method and test number	Parameter	No. tests	Results	
			Continuous parameter – mean (m)	Compliance with parameters
EN 13823				
Aero standard with BASF 5200	FIGRA _{0.2MJ} [W/s]	5	109	-
	FIGRA _{0.4MJ} [W/s]		109	-
	THR _{600s} [MJ]		7.7	-
	LFS < edge		-	Compliant
	SMOGRA [m ² /s ²]		3.0	-
	TSP _{600s} [m ²]		41	-
	Flaming debris - flaming ≤ 10 s - flaming > 10 s		- -	Compliant Compliant

3.3.4 SBI test results report 2025-Efectis-R001209

Test method and test number	Parameter	No. tests	Results	
			Continuous parameter – mean (m)	Compliance with parameters
EN 13823				
Special 025	FIGRA _{0.2MJ} [W/s]	1	107	-
	FIGRA _{0.4MJ} [W/s]		107	-
	THR _{600s} [MJ]		7.0	-
	LFS < edge		-	Compliant
	SMOGRA [m ² /s ²]		3.4	-
	TSP _{600s} [m ²]		42	-
	Flaming debris - flaming ≤ 10 s - flaming > 10 s		- -	Compliant Compliant

3.4 CLASSIFICATION CRITERIA

Fire classification of construction products and building elements Excluding floorings and linear pipe thermal insulation products			
Classification criteria			
Class	B	C	D
Test method(s)			
EN ISO 11925-2 Exposure = 30 s	F _s ≤ 150 mm within 60 s Ignition of the paper in EN ISO 11925-2 results in a d2 classification.		
EN 13823	FIGRA _{0,2 MJ} ≤ 120 W/s LFS < edge of specimen THR _{600s} ≤ 7.5 MJ	FIGRA _{0,4 MJ} ≤ 250 W/s LFS < edge of specimen THR _{600s} ≤ 15 MJ	FIGRA _{0,4 MJ} ≤ 750 W/s
Additional classification			
Smoke production	s1 = SMOGRA ≤ 30 m ² /s ² and TSP _{600s} ≤ 50 m ² ; s2 = SMOGRA ≤ 180 m ² /s ² and TSP _{600s} ≤ 200 m ² ; s3 = not s1 or s2		
Flaming Droplets/particles	d0 = no flaming droplets/ particles in EN 13823 within 600 s; d1 = no flaming droplets/ particles persisting longer than 10 s in EN 13823 within 600 s; d2 = not d0 or d1.		

4. CLASSIFICATION AND FIELD OF APPLICATION

4.1 REFERENCE OF CLASSIFICATION

This classification has been carried out in accordance with clause 11 of EN 13501-1:2018.

4.2 CLASSIFICATION

The product, **Unidek Aero - Unidek Aero Comfort- Unidek Aero Confort, Unidek Aero MB - Unidek Aero comfort MB - Unidek Aero Confort MB, Unidek Aero Light, Unidek Aero Plus, Unidek Special 025**, in relation to its reaction to fire behaviour is classified:

C

The additional classification in relation to smoke production is:

s2

The additional classification in relation to flaming droplets / particles is:

d0

Reaction to fire classification: C– s2, d0

4.3 FIELD OF APPLICATION

This classification is valid for the following product parameters:

Thickness 108-339 mm

Surface density 17.5-25 kg/m²