

redefining sitting comfort

EXCEL®

# redefining sitting comfort

# **EXGEL®**





# What is EXGEL®?



## **Background**

EXGEL was developed as ultimately soft and stable material to reduce the risk of decubitus ulcer.

KAJI CORPORATION has been utilizing EXGEL for various products by combining excellent characteristics of EXGEL and own products' development ability and manufacturing technology.

#### **Characteristics**

EXGEL's flexibility is extremely high; it stretches about 20 times and able to restore to its original form.

Its soft and slow recovery natures are gentle to human's skin, and realize ideal skin contact possible.

EXGEL also has an excellent shock absorbability, and proved more than 10 times high shock absorbability than general urethane foam in tests.

# **Comments from professional**

Sitting in the same position for a long time can cause pressure and shear forces that obstruct blood flow, and it can increase the risk of decubitus ulcers.

The pressure under the tissue is considered to be 3-5 times higher than that of skin surface, and skin tissues can be damaged once shear forces applied.

Gel material can buffer shear forces and redistribute the pressure, and is suitable for seating supports.

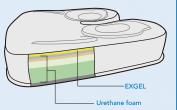
Therefore, the gel is considered to be effective for preventing decubitus ulcers, as well as comfortable seating. (Professor Makiko Tanaka, Yamaguchi Prefectural University. Japanese Society of Pressure Ulcers)



# Benefit of EXGEL® cushions

### Multilayer of EXGEL and foam

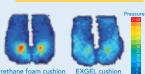
Multilayered foams of different density and EXGEL provide not only pressure redistribution but also stable and comfortable seating while keeping the cushion weight light.



# Pressure redistribution and skin protection

When the body weight is applied, EXGEL changes its shape in every direction and conforms to the body shape maximizing the contact surface so the pressure is supported by wider area and evenly redistributed. EXGEL also moves along with client's body movement. It buffers shearing forces and reduces the risks of skin break down.





# Easy to use and maintain

EXGEL goes back to the original shape once the load is removed, which means re-adjustment of gel is not required. EXGEL does not bottom out nor puncture. Cover is water resistant and machine washable.

Surface material of the cushion body can be easily wiped off or disinfected by spraying disinfectant. Just place the cushion on wheelchair and it is ready to use. Very simple and user friendly for both wheelchair users and care-providers.



#### **Cushion covers**

Incontinence cover:

The original cover which comes with the cushion order. High stretch and machine washable. Thin urethane foam used as a layer prevents heat built-up and helps to keep the surface dry.

Film lamination layer protects cushion from fluid.



#### Breathable cover:

Available as an optional cover. High stretch and machine washable mesh cover. Thin urethane foam used as a layer prevents heat built-up and helps to keep the surface dry.



Both covers' outer fabric passed Cytotoxicity test, ISO 10993-5, and meets flammability requirement for California Bulletin 117.

#### **High quality**

All of EXGEL cushions and covers are manufactured in Japan with the finest materials under quality management standard of ISO9001.





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# Wide range of cushions

Total of 10 different types of cushions meet variety of requirements of wheelchair users and people with restricted mobility.





Lite Cushion

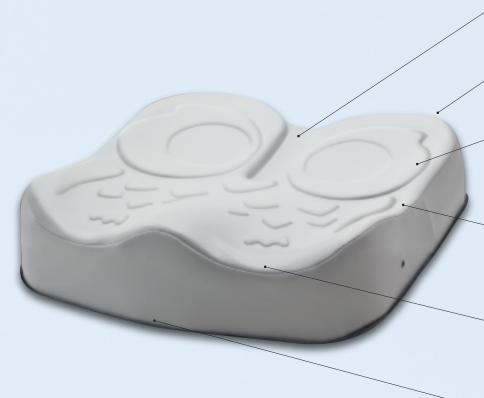
**EXGEL** wheelchair cushion guide

		Pressure Redistribution	Care for Coccyx and Sacral area	Postual Support	Forward/Reward Stability	Easy-to-Carry
EXGEL Owl Cushion	Regular Company	*	* *	*	*	*
	High	* * *	* * *	*	*	*
	Contour	* *	* *	* *	* *	*
	Deep Contour	* * *	* * *	* * *	* * *	*
	Deep Contour Slim	* *	* *	* * *	* * *	*
EXGEL Standard Cushion	Regular	*	*	*	*	*
	High	* *	*	*	*	*
	Anti- Thrust	* *	*	* *	* *	*
EXGEL Lite Cushion	Regular	*	*	*	*	* * *
	High	* *	*	*	*	* *

# Owl® Cushion

Owl shape optimizes pressure redistribution on wheelchairs. 5 types of form variations correspond to the various conditions.

#### **Product Features**



For wheelchair users who need superior pressure redistribution.
Suitable for the sacral sitter.Provides moderate postural support.
The High is recommended for the client who needs further pressure redistribution.
The Contour is recommended for the client needing forward/rearward stability, and for further postural support, the Deep Contour is recommended.

#### **Owl Slit**

Reduces the risk of pressure sores at the coccygeal area and the sacral area.

# **Hipline Shape**

Fits the curve of the hip.

# **Owl Eyes**

EXGEL effectively reduces the pressure on the ischium, where the strongest pressure is applied.

### 3D-shape

The seating surface is designed for the effective redistribution of the body pressure and stable sitting posture.

(Contour/Deep Contour/Deep Contour Slim)

#### Front soft edge

Carefully arranged shape and material of the front edge offer comfortable seating.
(Regular/High/Contour/Deep Contour/Deep Contour Slim)

# Taper-shaped bottom

The shape of the bottom is designed for better fitting to the wheelchair seating area.

(Contour/Deep Contour/Deep Contour Slim)

## Structure

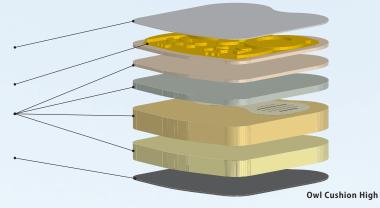
Recommendations

Synthetic leather on the surface of body can be disinfected with ethanol.

EXGEL excellently redistributes the body pressure.

Multilayered high density urethane foam provides proper immersion and supports stable sitting posture.

Adopted a strong skidproof in base of body and cover.



#### Cover

Incontinence cover: fluid resistant laminated layer protects cushion from moisture. Breathable cover: breathable mesh fabric dissipates moisture.

Machine washable.

The outer fabric passed Cytotoxicity test, ISO 10993-5, and meets flammability requirements for CA Bulletin 117.



# Lineup

# Regular



Reduces the pressure on the ischium and the coccygeal area effectively. 4 cm thickness.

# Pressure mapping data Pressure High The coccygeal area The ischium area Urethane foam cushion

# High



Sufficient height and immersion in order to prevent increased pressure at ischial tuberosities. 8 cm thickness.



Owl Cushion Regular

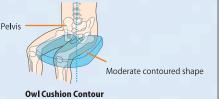
Owl Cushion High

Contour



Contoured shape provides comfortable and stable seating. 5.3 - 7.5 cm thickness.

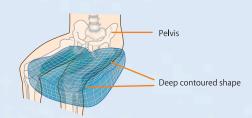




**Deep Contour** 



Deeper contoured shape for more effective postual support. 6.5 - 11 cm thickness.



# **Deep Contour Slim**



Deep contour low profile type. 3.5 - 8.0 cm thickness.

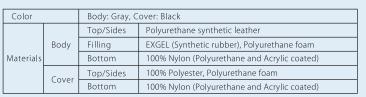


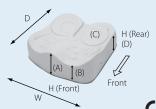
# **Specifications**

		Regular	High	Contour	Deep Contour	Deep Contour Slim
	H (cm)	H: 4.0	H: 8.0	Front (A): 7.5 (B): 7.2 Rear (C): 5.3 (D): 6.8	Front (A): 11.0 (B): 8.0 Rear (C): 6.5 (D): 8.8	Front (A): 8.0 (B): 5.0 Rear (C): 3.5 (D): 6.8
W:	(D (cm)	Product Code	Product Code	Product Code	Product Code	Product Code
3	6 x 40	OWL21-BK1-3640-E	OWL22-BK1-3640-E	OWL23-BK1-3640-E	OWL24-BK1-3640-E	OWL25-BK1-3640-E
3	8 x 40	OWL21-BK1-3840-E	OWL22-BK1-3840-E	OWL23-BK1-3840-E	OWL24-BK1-3840-E	OWL25-BK1-3840-E
4	0 x 40	OWL21-BK1-4040-E	OWL22-BK1-4040-E	OWL23-BK1-4040-E	OWL24-BK1-4040-E	OWL25-BK1-4040-E
4	6 x 40	OWL21-BK1-4640-E	OWL22-BK1-4640-E	OWL23-BK1-4640-E	OWL24-BK1-4640-E	
4	0 x 46					OWL25-BK1-4046-E
4	3 x 46					OWL25-BK1-4346-E
4	5 x 46		OWL22-BK1-4646-E			OWL25-BK1-4646-E
5	1 x 46					OWI 25-BK1-5146-F



Contour, Deep Contour, Deep Contour Slim





# **EXGEL® Standard Cushion**

EXGEL cushion's standard model, winning the long time popularity as a wheelchair cushion.

EXGEL used in entire surface redistributes the body pressure effectively. EXGEL also buffers shearing forces between the body and cushions.

# **Product Features**



#### Recommendations

For wheelchair users who need superior pressure redistribution. The High is recommended for the client who needs further pressure redistribution.

The Anti-Thrust is recommended for the client needing forward/rearward stability.

#### Cover

Incontinence cover: fluid resistant laminated layer protects cushion from moisture. Breathable cover: breathable mesh fabric dissipates moisture.

Machine washable.

The outer fabric passed Cytotoxicity test, ISO 10993-5, and meets flammability requirements for CA Bulletin 117.



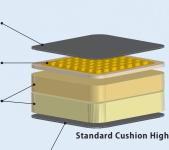
### Structure

Synthetic leather on the surface of body can be disinfected with ethanol.

EXGEL excellently redistributes the body pressure.

Multilayered high density urethane foam provides proper immersion, and supports stable sitting posture.

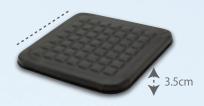
Adopted a strong skidproof in base of body and cover.



# Lineup

# Regular

Easy to use flat style. 3.5cm thickness.



### High

Added more immersion and stability. 6.5cm thickness.



#### **Anti Thrust**

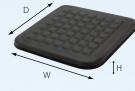
Prevents unwanted forward move of ischium. Front: 8.5cm, Rear: 7cm thickness.



# **Specifications**

	Regular	High	Anti-Thrust
H (cm)	H: 3.5	H: 6.5	Front 8.5 Rear 7.0
W x D (cm)	Product Code	Product Code	Product Code
30 x 30	ESC01-BK1-3030-E	ESC02-BK1-3030-E	
33 x 33	ESC01-BK1-3333-E	ESC02-BK1-3333-E	
36 x 36	ESC01-BK1-3636-E	ESC02-BK1-3636-E	
36 x 40	ESC01-BK1-3640-E	ESC02-BK1-3640-E	
40 x 40	ESC01-BK1-4040-E	ESC02-BK1-4040-E	ESC03-BK1-4040-E
40 x 43	ESC01-BK1-4043-E	ESC02-BK1-4043-E	
40 x 46	ESC01-BK1-4046-E	ESC02-BK1-4046-E	
43 x 40	ESC01-BK1-4340-E	ESC02-BK1-4340-E	
43 x 43	ESC01-BK1-4343-E	ESC02-BK1-4343-E	
46 x 40	ESC01-BK1-4640-E	ESC02-BK1-4640-E	ESC03-BK1-4640-E
46 x 46	ESC01-BK1-4646-E	ESC02-BK1-4646-E	ESC03-BK1-4646-E
46 x 49	ESC01-BK1-4649-E	ESC02-BK1-4649-E	
46 x 51	ESC01-BK1-4651-E	ESC02-BK1-4651-E	
49 x 49	ESC01-BK1-4949-E	ESC02-BK1-4949-E	

Regular, High





Color		Body: Black, Cover: Black		
		Top/Sides	Polyurethane synthetic leather	
Body	Filling	EXGEL (Synthetic rubber), Polyurethane foam		
Materials		Bottom	100% Nylon (Polyurethane and Acrylic coated)	
Cover	Top/Sides	100% Polyester, Polyurethane foam		
	Cover	Bottom	100% Nylon (Polyurethane and Acrylic coated)	

# EXGEL® Lite Cushion

Easy-to-carry EXGEL cushion for wheelchairs. EXGEL used in ischium area redistributes the body pressure effectively.

# **Product Features**



#### Recommendations

Wheelchair users who need light-weight and high performance pressure relief cushion.

The High is recommended for the client who needs further pressure redistribution.

#### Cover

Incontinence cover: fluid resistant laminated layer protects cushion from moisture.

Breathable cover: breathable mesh fabric dissipates moisture.

Machine washable.

The outer fabric passed Cytotoxicity test, ISO 10993-5, and meets flammability requirements for CA Bulletin 117.



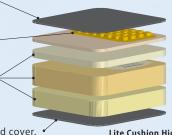
Synthetic leather on the surface of body can be disinfected with ethanol.

EXGEL excellently redistributes the body pressure.

Multilayered high density urethane foam provides proper immersion, and supports stable sitting posture.

Adopted a strong skidproof in base of body and cover.





Lite Cushion High

# Lineup

# Regular

Easy to use flat style. 5.5cm thickness.



#### High

Added more immersion and stability. 7.5cm thickness.



# **Specifications**

		Regular	High	
	H (cm)	H: 5.5	H: 7.5	
W x D (cm)		Product Code	Product Code	
40 x 40		ELC01-BK1-4040-E	ELC02-BK1-4040-E	
46 x 40		ELC01-BK1-4640-E	ELC02-BK1-4640-E	
46 x 46		x 46 ELC01-BK1-4646-E ELC02-BK1-4646		



	Body: Black, Cover: Black		
	Top/Sides	Polyurethane synthetic leather	
Body	Filling	EXGEL (Synthetic rubber), Polyurethane foam	
	Bottom	100% Nylon (Polyurethane and Acrylic coated)	
Cover	Top/Sides	100% Polyester, Polyurethane foam	
	Bottom	100% Nylon (Polyurethane and Acrylic coated)	
	,	Body Filling Bottom Top/Sides Forces	



www.exgel.jp

# **Company Information**



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EXGEL products are CE-labelled as medical devices (class 1), which means that the characteristics of products meet the requirements of directive 93/42/EEC.

# **Distributor / Dealer**