

	<b>Material Safety Data Sheet</b> according to regulation (EG) No. 1907/2006	<b>ISOCELL</b>
	<b>Product: OMEGA FA G50</b>	

## 1. Product- and Company Identification

- 1.1. Product description:** OMEGA FA G50
- 1.2. Product usage:** breathable facade membrane
- 1.3. Company name:**

ISOCELL GmbH & Co KG  
Gewerbestraße 9  
5202 Neumarkt am Wallersee  
Austria  
E-Mail: [office@isocell.at](mailto:office@isocell.at)  
Information provided by: technical department

## 2. Hazard Identification

This mixture was not evaluated as a package. Information on health effects is based on individual components of the product.

### 2.1 Classification of the product

Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]

The product is classified as hazardous according to Regulation (EC) 1272/2008 and its amendments.

Skin Sens. 1, H317  
Aquatic Chronic 4, H413  
Aquatic Chronic 3, H412

See section 16 for the full text of the above H-phrases.  
See section 11 for more detailed information on health effects and symptoms.

### Labelling elements

This ingredient can migrate outside the polymer matrix. Labelling according to reception is not necessary (according to EC 1272/2008 article 23d), however, the potential migration during use after 6 months storage of the substance should be considered.

	<b>Material Safety Data Sheet</b> according to regulation (EG) No. 1907/2006	<b>ISOCELL</b>
	<b>Product: OMEGA FA G50</b>	

Hazard pictograms: Not applicable.

Signal word: Not applicable.

Hazard statements: Not applicable.

#### Safety Instructions

General: Not applicable.

Prevention: Not applicable.

Reaction: Not applicable.

Storage: Not applicable.

Disposal: Not applicable.

Hazardous ingredients: 2-Benzotriazolyl-4-methylphenol

Additional labelling elements: Not applicable.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and products: Not applicable

Other hazards:

Substance meets the criteria for PBTs according to Regulation (EC) No 1907/2006, Annex XIII : See sections 3 and 15 for details.

Substance fulfils the criteria for vPvB according to Regulation (EC) No 1907/2006, Annex XIII: See sections 3 and 15 for details.

Other hazards that do not lead to classification:

Material can form flammable mixtures or can burn only upon heating to temperatures at or above the flash point

Decomposes. Flammable / Toxic gases will form upon decomposition. (See Section 10)

Static Discharge. Product can accumulate static charges which can cause an incendiary electrical discharge.

### **3. Composition / Information on ingredients**

#### **Composition:**

Non-woven: Polyester

Coating: Thermoplastic polyurethane

Additives: colour-masterbatch black

UV-stabilizer

	<b>Material Safety Data Sheet</b> according to regulation (EG) No. 1907/2006	<b>ISOCELL</b>
	<b>Product: OMEGA FA G50</b>	

### Comments on specific components:

Name of the product / Ingredient	Identifier	%	Classification	Typ
			Regulation (EG) Nr. 1272/2008 [CLP]	
2-Benzotriazolyl-4-methylphenol	EG:219-470-5 CAS: 2440-22-4	>0,4 - <0,8 % in the functional layer >0,15 - <0,3 in total	Skin Sens. 1, H317 Aquatic Chronic 41, H4103	[1]
Butanedioic acid, dimethyl ester, polymer with 4-hydroxy-2,2,6,6-tetramethyl-1-piperidineethanol	EG:613-797-0 CAS: 65447-77-0	>0,4 - <0,8 % in the functional layer >0,15 - <0,3 in total	Aquatic Chronic 3, H412	[1]

#### Type

- 1] Substance has been classified as physically, health or environmentally hazardous
- 2] Substance with an occupational exposure limit value
- 3] Substance meets the criteria for PBTs according to Regulation (EC) No 1907/2006, Annex XIII
- 4] Substance meets the criteria for vPvB according to Regulation (EC) No 1907/2006, Annex XIII
- 5] Substance of Very High Concern

See section 16 for the full text of the above H-phrases.

There are no additional ingredients which, according to the supplier's current knowledge, are classified as harmful to health or the environment in the appropriate concentrations and therefore would need to be reported in this section.

## 4. First aid measures

### Description of first aid measures

**After inhalation:** In case of contact with gases generated at elevated temperatures and in case of fire, remove the affected person to fresh air and rest in a position that facilitates breathing. In the event of non-existent or irregular breathing or if respiratory arrest occurs, trained personnel must initiate artificial respiration or oxygenation. It may be dangerous for the person providing first aid to perform mouth-to-mouth resuscitation. Seek medical attention if the health impairment persists or is serious. If unconscious, place in a stable lateral position and seek medical attention immediately. Keep airways open. Loosen tight-fitting clothing (e.g. collar, tie, belt or waistband). Inhalation of the combustion products may cause delayed onset of symptoms. The affected person may need to remain under medical observation for 48 hours.

**After skin contact:** First aid is generally not required. Wash with soap and water.

	<b>Material Safety Data Sheet</b> according to regulation (EG) No. 1907/2006	<b>ISOCELL</b> 
	<b>Product: OMEGA FA G50</b>	

**After eye contact:** This product is an inert solid. If any of it enters the eyes, immediately flush eyes with plenty of water and occasionally lift upper and lower eyelids. Check for contact lenses and remove if present. Flush continuously for at least 10 minutes. Consult a physician if irritation occurs.

**After swallowing:** Rinse mouth with water. Remove denture if present. Move the affected person to fresh air and rest in a position that facilitates breathing. If the substance has been swallowed and the affected person is conscious, give small amounts of water to drink. In case of nausea, do not continue drinking as vomiting can be dangerous. Do not induce vomiting unless specifically directed to do so by medical personnel. If vomiting occurs, keep the head low so that the vomit does not enter the lungs. Seek medical attention if the health problems persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in a stable lateral position and seek medical attention immediately. Keep airways open. Loosen tight-fitting clothing (e.g. collar, tie, belt or waistband).

**Protection of first responders:** No measures should be taken that involve personal risk or that have not been sufficiently trained. It can be dangerous for the person providing first aid to perform mouth-to-mouth resuscitation.

### **Main acute or delayed symptoms and effects**

#### Possible acute health effects

Eye contact: No special effects or dangers known.

Inhalation: Exposure to decomposition products may cause damage to health. After exposure, serious damage may be delayed.

Skin contact: May cause allergic skin reactions.

Ingestion: No special effects or dangers known

#### Signs/symptoms of overexposure

Eye contact: No specific data.

Inhalation: No specific data.

Skin contact: Symptoms may include: Irritation Redness

Ingestion: No specific data.

### **Indications of emergency medical aid or special treatment**

Information for the doctor: Symptoms may occur with a delay if the combustion products are inhaled. The affected person may need to remain under medical observation for 48 hours.

Special treatment: No special treatment.

	<b>Material Safety Data Sheet</b> according to regulation (EG) No. 1907/2006	<b>ISOCELL</b>
	<b>Product: OMEGA FA G50</b>	

## 5. Fire – fighting measures

**5.1. Suitable extinguishing media:** all usual extinguishing agents such as water spray, dry chemical, CO<sub>2</sub>, foam, dry chemical, sand

**5.2. For safety reasons unsuitable extinguishing agents:** None

**5.3. Hazards:** A fire can release carbon dioxide, carbon monoxide, nitrogen oxides, monomers and traces of hydrogen cyanide. Thermal decomposition into toxic products can occur at high temperatures. Do not inhale fire and explosion gases. Ingredients of this product are toxic to aquatic organisms and have long-term effects. Contaminated fire-fighting water must be contained and must not be allowed to enter watercourses, sewage systems or drains.

**5.4. Fire fighting procedures:** In case of fire, immediately seal off the area and evacuate all persons from the danger zone. No measures should be taken that involve personal risk or that have not been sufficiently trained. Firefighters should wear appropriate protective clothing and self-contained breathing apparatus with full face protection, operating in positive pressure mode. Clothing for firefighters (including helmet, protective boots and protective gloves) that complies with the European Standard EN 469 provides basic protection in the event of accidents involving chemicals.

## 6. Accidental release measures

**6.1. Personal precautions:** None

**6.2. Methods and material for containment and cleaning:** Take up mechanically and collect in suitable containers for recovery or disposal. In the elimination of back material derived observe waste legislation. Safe handling, see section 7, waste disposal, see section 13

**6.3. Additional information:** Do not empty into drains and surface waters.

## 7. Handling and storage

**7.1. Precautions for safe handling:** Minimum hygienic standards must be observed at work. Persons with a history of hypersensitive skin should not perform any work involving the use of this product. Eating, drinking and smoking should be avoided when processing the product. Persons handling the product must wash their hands before eating, drinking or smoking.

	<b>Material Safety Data Sheet</b> according to regulation (EG) No. 1907/2006	<b>ISOCELL</b>
	<b>Product: OMEGA FA G50</b>	

**7.2. Conditions for safe storage:** Store in a cool, well-ventilated place at some distance from other incompatible materials such as strong acids and bases and strong oxidizing agents. Not handle, store or open near an open flame, heat or ignition. Protect material from direct sunlight. The product may charge electrostatically and discharged under sparking. Therefore take measures against electrostatic charging and earthed.

Recommended storage temperature: < +40°C

Transportation-, loading- and discharge temperature: ambient temperature

## 8. Exposure controls / Personal protection measures

**8.1. Exposure limits:** No exposure limits are known.

DNEL / DMEL Summary : Not available.

**8.2. Limiting and monitoring exposure in the workplace:**

Good normal indoor ventilation when used in enclosed spaces should be sufficient to limit workers' exposure to air pollutants.

Hygienic measures: Wash hands, forearms and face thoroughly after handling the product and at the end of the working day, as well as before eating, smoking and going to the toilet.

Respiratory protection: normally no personal respiratory protection necessary

Hand protection: Persons of appropriate disposition should wear tested protective gloves to protect against skin irritation

Eye protection: normally not required

Body protection: not necessary

**8.3. Delimitation and monitoring of environmental exposure**

PNEC Summary: Not available.

## 9. Physical and chemical properties

**9.1. General information:**

Physical state: solid

Colour: black / light green

Odour: odourless

	<b>Material Safety Data Sheet</b> according to regulation (EG) No. 1907/2006	<b>ISOCELL</b>
	<b>Product: OMEGA FA G50</b>	

## 9.2. Relevant safety data:

pH: not determined

Melting range: > 120°C

Decomposition Temperature: app. 230°C

Ignition temperature: >210°C

Solubility in Water: Insoluble

Explosion Hazard: No

## 10. Stability and reactivity

**10.1. Chemical stability:** Stable under normal conditions

**10.2. Conditions to avoid:** > 230°C incipient decomposition

**10.3. Hazardous decomposition products:** During smouldering or incomplete combustion, toxic gas mixtures are formed which contain mainly carbon monoxide, carbon dioxide and nitrogen oxides. At temperatures above the melting temperature of the product, small quantities of isocyanates can be released. In case of overexposure there is a risk of concentration-dependent inhalative irritation and/or sensitization by isocyanates (delayed onset of respiratory complaints, coughing, asthma is possible). In hypersensitive persons, reactions can be triggered even at very low isocyanate concentrations.

**10.4. Materials to avoid:** Contact with concentrated acids and bases, and strong oxidizing agents should be avoided.

## 11. Toxicological information

The product has not been assessed in total for health effects. Listed exposure effects are based on existing health data of individual components.

Below are the data available to us for the TPU used with additives:

### Information on toxicological effects

#### Acute toxicity

Name of the ingredient	Result	Species	Dose	Exposition
2-Benzotriazolyl-4-methylphenol	LD50 Oral	rat	10,000 mg/kg	
Butanedioic acid, dimethyl ester, polymer with 4-hydroxy-2,2,6,6-tetramethyl-1-piperidineethanol				

#### Acute toxicity, oral

Thermoplastic polyurethane

	<b>Material Safety Data Sheet</b> according to regulation (EG) No. 1907/2006	<b>ISOCELL</b>
	<b>Product: OMEGA FA G50</b>	

LD50 rat: > 5 000 mg/kg, Method: OECD test guideline 423, Examination on a comparable product.

**Acute toxicity, dermal**

Thermoplastic polyurethane

LD50 rat: > 2 000 mg/kg, Examination on a comparable product

**Acute toxicity, inhalation**

Thermoplastic polyurethane

Assessment: the substance or mixture does not have acute respiratory toxicity

Examination on a comparable product.

**Irritation / chemical burn**

Name of the ingredient	Result	Species	Score	Exposition	Observation
2-Benzotriazolyl-4-methylphenol	Eyes - Mild irritant	rabbit		24 h	-

**Primary skin irritation**

Thermoplastic polyurethane

Species: Rabbit

Result: non-irritant

Classification: No skin irritation

Method: OECD test guideline 404

Examination on a comparable product.

**Primary mucous membrane irritation**

Thermoplastic polyurethane

Species: Rabbit

Result: non-irritant

Classification: No eye irritation

Examination on a comparable product.

**Sensitization**

Skin / Respiratory: Mixture. Not fully tested.

Thermoplastic Polyurethane

Magnusson/Kligman skin sensitization (maximization test): Species: Guinea pig

Result: negative

Classification: Does not cause skin sensitization.

Method: OECD test guideline 406

Examination on a comparable product.

**Subacute, subchronic and long-term toxicity**

Thermoplastic polyurethane No data available

**Carcinogenicity**

mixture. Not fully tested.

Thermoplastic polyurethane : No data available.

**Reproductive toxicity / Teratogenicity**

mixture. Not fully tested.

Thermoplastic polyurethane: No data available.



	<b>Material Safety Data Sheet</b> according to regulation (EG) No. 1907/2006	<b>ISOCELL</b>
	<b>Product: OMEGA FA G50</b>	

**Genotoxicity in vitro**

Thermoplastic polyurethane  
 Test type: Salmonella/microsome test (Ames test)  
 Result: No evidence of a mutagenic effect.  
 Method: OECD test guideline 471  
 Examination on a comparable product.

**Genotoxicity in vivo**

Thermoplastic polyurethane: No data available.

**Assessment STOT - Single exposure**

Thermoplastic polyurethane: If the available database is used as a basis, the classification criteria are not met.

**Assessment STOT-repeated exposure**

Thermoplastic polyurethane: No data available

**Aspiration toxicity**

Thermoplastic polyurethane: No data available.

**Evaluation CMR**

Thermoplastic polyurethane  
 Carcinogenicity: No data available.  
 Mutagenicity: If the available data are used, the classification criteria are not met.  
 Teratogenicity: No data available.  
 Toxicity to reproduction: No data available.

**Possible acute health effects**

Eye contact: No special effects or dangers known.  
 Inhalation: Exposure to decomposition products may cause damage to health. After exposure, serious damage may be delayed.  
 Skin contact: May cause allergic skin reactions.  
 Ingestion: No special effects or dangers known.

**Possible chronic health effects**

mixture. Not fully tested.  
  
 General: After sensitization, severe allergic reactions may occur if exposed to very small amounts of the substance at a later time.  
 Carcinogenicity: No special effects or dangers known.  
 Mutagenicity: No special effects or dangers known.  
 Teratogenicity: No special effects or hazards known.  
 Developmental effects: No special effects or hazards known.  
 Effects on fertility: No special effects or dangers known.

**12. Ecological information**

**Ecotoxicity:** Chemicals are bound in the matrix of the polymer and therefore not really free present.

**Persistence and degradability:** poorly biodegradable

**Bioaccumulative potential:** not applicable

	<b>Material Safety Data Sheet</b> according to regulation (EG) No. 1907/2006	<b>ISOCELL</b>
	<b>Product: OMEGA FA G50</b>	

**Result of PBT and vPvB assessment:** not available

**Mobility:** not available

**Other adverse effects:** not specified

### 13. Disposal consideration

#### Waste disposal

The product can be used in compliance with all applicable international, national and local laws, regulations and statutes.

### 14. Transport information

#### Land transport (railroad/road, such as RID/ADR)

This product is not regulated for road / rail transport.

#### Inland waterways (such as ADN/R)

This product is not regulated for inland waterways transport.

#### Sea (IMDG)

This product is not regulated for sea transport.

#### AIR (ICAO/IATA)

This product is not regulated for air transport.

### 15. Regulatory information

#### 15.1. EU-regulations

No labelling according to the hazardous substances ordinance and corresponding EC directives and ordinances required.

Hazard criteria: E1 Hazardous to waters - Chronic 1

#### 15.2. National regulations

Not subject to Hazardous Incident Ordinance

Technical Instructions on Air Quality: not applicable

Water hazard class: WGK 1 appendix no. 4

Other regulations or restrictions: no

	<b>Material Safety Data Sheet</b> according to regulation (EG) No. 1907/2006	<b>ISOCELL</b>
	<b>Product: OMEGA FA G50</b>	

## 16. Other information

Full text of the abbreviated H-phrases:

H317 can cause allergic skin reactions

H411 Toxic to aquatic organisms, with long-term effects.

H412 Harmful to aquatic organisms, with long-term effects.

H413 May be harmful to aquatic organisms, with long-term effects.

The safety data sheet is intended to protect man and the environment by providing appropriate information to users.

The information given in this safety data sheet reflects the state of knowledge at the time of completion at the date of issue. They are not contractual guarantees of product properties. No guarantee is given for factors beyond our knowledge and control. Each user is therefore responsible for checking the intended area of application and the respective use, taking into account any specific features. Freedom from patent, copyright and utility model protection rights cannot be assumed.