

## MATERIAL SAFETY DATA SHEET

Conforms to the Commission Regulation (EU) No. 2015/830 of 28th May 2015 amending Regulation (EC) No. 1907/2006 of the European Parliament and of 18th December 2006 on the registration, evaluation, authorization and restriction of chemicals (REACH) (Journal of Laws of the European Union, series L No. 133 of May 31st 2010.)

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### ***SECTION 1: Identification of the substance/mixture and of the company/undertaking***

#### ***1.1. Product identifier***

***Product Name: ORZEL ACTIVE FINE POWDER, ORZEL POWDER, ORZEL INFILL, ORZEL BASE.***

#### ***1.2. Relevant identified uses of the substance or mixture and uses advised against***

Identified use:

To develop external sports facilities surfaces and other rubber products used outdoors.

#### **Details of the supplier of the safety data sheet**

**ORZEŁ S.A**

**ul. Przemysłowa 50**

**24-320 Poniatowa**

**Tel. (81) 4755700**

**Fax. (81) 4755709**

**E-mail: [info@orzelsa.com](mailto:info@orzelsa.com)**

**Website: [www.orzelsa.com](http://www.orzelsa.com)**

#### ***1.3. Emergency telephone number***

Product information:

**+48 814755700** (8am - 5pm Mon-Fri).

Emergency telephone: 112, FIRE BRIGADE 998 or the nearest local unit of the State Fire Service.

### ***SECTION 2: Hazards identification***

#### ***2.1. Classification of the substance or mixture***

SBR rubber granules are not harmful to health. The product exhibits a stable composition and does not pose any threat in storage or transportation. The rubber granulate was evaluated positively regards health impact by the National Institute of Hygiene. Hygienic Certificate No. HK/B/0843/01/2016.

##### ***2.1.1. Classification of substances***

Not applicable.

##### ***2.1.2. Classification of the mixture***

2.1.2.1. Classification according to Regulation (EC) No.1272/2008  
SBR rubber granulate is not classified as hazardous to human health and environment.

2.1.2.2. Adverse effects on human health.

SBR rubber granulate is not classified as hazardous to human health.

2.1.3.3. Effects on environment.

SBR rubber granulate is not classified as hazardous to the environment.

2.1.4.3. Effects related to physicochemical properties.

There are no known adverse effects associated with its physicochemical properties.

## **2.2. Label elements**

Hazard pictograms:

None.

Signal words:

None.

Hazard statements:

None.

Precautionary statements:

Prevention:

No special recommendations.

Response:

No special recommendations.

Storage:

No special recommendations.

Removal:

No special recommendations.

## **2.1. Other threats.**

SBR granulate does not meet the PBT or vPvB criteria in accordance with Annex XIII of the REACH Regulation.

## ***SECTION 3: Composition/information on ingredients***

### **3.1. Substances**

### **3.2. Mixtures**

The SBR rubber granulate consists mainly of a mixture of vulcanized rubber, which includes i.a. natural and synthetic rubber, organic and mineral substances, soot and additives. The product does not contain substances classified as dangerous.

Natural rubber: approx. 15%

SBR (styrene-butadiene rubber): approx. 20%

BR (butadiene rubber): approx. 10%

IIR/XIIR (butyl and halogenated butyl): approx. 5%

Silica: approx. 15%

Carbon black: approx. 15%

Sulfur: approx. 2%

Resin:	approx. 2%
Mineral and vegetable oils:	approx. 10%
Other (zinc oxide, stearic acid):	approx. 6%

## ***SECTION 4: First aid measures***

### **4.1. Description of first aid measures**

Inhalation: Lead out or remove the casualty from the place of exposure, arrange in a comfortable reclining or sitting position, ensure peace and protect against heat loss. In case of feeling unwell, consult a physician.

Skin contact: Wash contaminated skin with plenty of water and soap and rinse thoroughly. In case of alarming symptoms, consult a physician.

Eye contact: Rinse eyes with plenty of cool water, preferably running, for at least several minutes, with eyelids open wide. Avoid a strong water jet due to the risk of mechanical damage to the cornea. Remove contact lenses. In case of alarming symptoms, consult a physician.

Gastrointestinal tract: Ingestion may cause nausea, vomiting or diarrhoea. Consult a physician immediately.

### **4.2. Most important symptoms and exposure effects, both acute and delayed.**

After inhalation of dust, possible irritation of the mucous membranes of the upper respiratory tract and coughing. Skin redness may occur in long-term skin contact. In contact with eyes, there may appear mechanical irritation, tearing and burning of the eyes. Increased ingestion of the substance may cause nausea, vomiting or diarrhoea.

### **4.3. Indication of any immediate medical attention and special treatment of the victim.**

Symptomatic treatment. Rescue procedure is decided by the physician upon thorough assessment of the victim's condition.

## ***SECTION 5: Fire-fighting measures***

### **5.1. Extinguishing media.**

Suitable extinguishing media:

Foam, extinguishing powders, water spray.

### **5.2. Special hazards related to the substance or mixture.**

Toxic fumes are released in combustion (carbon dioxide, carbon monoxide, sulphur dioxide). Avoid inhalation of the toxic fumes as they may pose a serious health risk.

### **5.3. Information for fire-fighters.**

General protection measures typical in case of fire. Do not stay in fire-affected area without suitable protective clothing and a self-contained breathing apparatus. Collect used up extinguishing media.

## ***SECTION 6: Accidental release measures***

If granules are released, the spilled product should be collected, impurities removed and then it can be re-used in production.

**6.1. Personal precautions, protective equipment and emergency procedures**

Limit unauthorised persons access to the work area. Fence and mark the site. Use personal protective equipment. Avoid contact with eyes, skin, and do not breathe the dust in. Ensure adequate ventilation. Avoid open fire.

**6.2. Environmental precautions**

In case of fire, notify appropriate emergency services.

**6.3. Methods and material for containment and cleaning up**

Collect spilled granules mechanically into labelled containers. Re-use the collected material or hand over to authorized waste disposal services.

**6.4. Reference to other sections**

Dispose of in accordance with recommendations given in section 13. Use personal protective equipment in accordance with section 8.

***SECTION 7: Handling and storage of substances and mixtures***

Storage: The granulate should be stored in accordance with ISO 2230. It should be stored in a dry, well ventilated place at a room temperature, below 25°C. For safety reasons, keep away from open fire.

**7.1. Precautions for safe handling**

Handle in accordance with the health and safety regulations. Do not eat, drink or smoke while handling the product. Wash hands during breaks and after work. Avoid contact with eyes and prolonged contact with the skin. Ensure proper ventilation, avoid forming and inhaling dust.

**7.2. Conditions for safe storage, including any incompatibilities**

Store the product in the original, properly labelled and tightly closed packaging, in a cool, dry, and well-ventilated room. Do not store near food and drink. Keep away from combustible materials. It may undergo caking during long-term storage. Protect against moisture.

**7.3. Specific end use(s)**

No information on applications other than those provided in subsection 1.2.

***SECTION 8: Exposure controls/ personal protection*****8.1. Control parameters**

The highest permissible workplace exposure limits.

Dust containing free (crystalline) silica from 2% to 50%

a) inhaled fraction NDS 4mg/m<sup>3</sup>

b) respirable fraction NDS 1mg/m<sup>3</sup>

Legal basis: Journal of Laws 2014, item 817.

Recommended monitoring procedures

Procedures should be applied to monitor the concentration of hazardous components in the air and check the quality of the air at the workplace - provided such procedures are available and

justified at a given position in accordance with relevant Polish or European Standards, taking into account conditions at the place of exposure and appropriate measurement methodology adapted to the workplace conditions. The mode, type and frequency of tests and measurements should meet the requirements contained in the ordinance of the Minister of Health of 2nd February, 2011 (Journal of Laws No. 33, item 166).

## **8.2. Exposure controls**

### **8.2.1. Appropriate technical measures.**

Ensure sufficient general and/or local ventilation at the workplace.

### **8.2.2. Individual protection measures, such as personal protective equipment.**

General information: The used personal protective equipment must meet the requirements of the Regulation of the Minister of Economy of 28th December, 2005 (Journal of Laws No. 259, item 2173) and Directive 89/686/EC (along with subsequent amendments). The choice of personal protective equipment should be made taking into account the form and concentration of the contaminant at the workplace, exposure routes, exposure time and activities performed by an employee. The employer is obliged to provide protection measures that meet the requirements of CE conformity assessment and all the quality requirements, as well as their maintenance and cleaning.

Respiratory protection: In case of sufficient ventilation, respiratory protection is not required. In case of high dusting, wear a half-mask with an appropriate filter P1, P2 or P3.

Hands and skin: Use latex coated protective gloves, protective hand cream.

Eyes: Use safety goggles in case of eye contact risk.

Work hygiene: The general provisions of industrial occupational hygiene apply. After work, remove contaminated clothing. Wash hands and face before work breaks. Wash the entire body thoroughly after work. Do not eat, drink or smoke during work.

Methods of exposure assessment at the workplace:

PN-Z-01004:1999 Protection of air cleanliness. Units of measurement.

PN-Z-04008-7: 2002+Az1:2004 Protection of air cleanliness. Sampling. Principles of air sampling at the workplace and interpretation of results.

### **8.2.3. Control of environmental exposure.**

Possible ventilation systems and process equipment emissions should be checked in order to determine their compliance with the requirements of environmental law.

## ***SECTION 9: Physical and chemical properties***

### **9.1. Information on basic physical and chemical properties**

Form:	granules
Colour:	black:
Odour:	mild
Melting point:	not determined
Boiling point:	not determined
Density:	600-700 kg/m <sup>3</sup>
Vapour pressure:	not determined

Viscosity:	not determined
Solubility:	does not dissolve in water,
pH:	not determined
Flash point:	> 350°C
Flash point temperature:	> 350°C
Explosion limit:	not determined
Thermal decomposition:	> 180°C
Hazardous decomposition: Products:	SO <sub>x</sub> , NO <sub>x</sub> , organic hydrocarbons, decomposition at temperatures below 800°C and under oxygen deficiency conditions - intensive soot formation.

## 9.2. Other information

### *SECTION 10: Stability and reactivity*

Rubber granulate is a black solid that is not soluble in water, and is stable and non-reactive under normal conditions.

#### **10.1. Reactivity**

Under normal conditions non-reactive.

#### **10.2. Chemical stability**

Under normal conditions stable.

#### **10.3. Possibility of hazardous reactions**

No data

#### **10.4. Conditions to avoid**

Rubber dust creates explosive mixtures.

#### **10.5. Incompatible materials**

None known.

#### **10.6. Hazardous decomposition products**

Hazardous decomposition: SO<sub>x</sub>, NO<sub>x</sub>, organic hydrocarbons,

Products: decomposition at temperatures below 800°C and under oxygen deficiency conditions - intensive soot formation.

### *SECTION 11: Toxicological information*

#### **11.1. Information on toxicological effects**

Based on available data (National Institute of Hygiene Certificate), there are no known effects.

### *SECTION 12: Ecological information*

Granules are not classified as hazardous to the environment. Solid material insoluble in water. Resistant to biological degradation.

#### **12.1. Toxicity**

Not toxic.

## **12.2. Persistence and degradability**

Resistant to biological degradation.

## **12.3. Bioaccumulative potential**

None.

## **12.4. Mobility in soil**

Not mobile. Solid material insoluble in water.

## **12.5. Results of PBT and vPvB assessment**

Not applicable.

## **12.6. Other adverse effects**

No data

## ***SECTION 13: Disposal considerations***

### **13.1. Waste treatment methods.**

**Recommendations for granules:** Dispose of in accordance with applicable regulations. Store the residues in original containers. The waste product should be transferred to an authorized disposal company. The waste code should be assigned at the place of manufacture.

**Recommendations for used packaging:** recovery/recycling/liquidation of packaging waste should be carried out in accordance with applicable regulations. Reusable packaging can be used again after having been cleaned. Disposable packaging should be recycled.

**Community legal acts:** Directives of the European Parliament and Council: 2008/98/EC, 94/62/EC.

**National legal acts:** Journal of Laws 2013, item 21 with subsequent amendments; Journal of Laws 2013, item 888.

## ***SECTION 14: Transport information***

### **14.1. UN number**

The product is not classified as dangerous for land, sea or air transport.

### **14.2. Proper UN transport name**

Not applicable.

### **14.3. Hazard class(s) in transport**

Not applicable.

### **14.4. Packing group**

Not applicable.

### **14.5. Threats to the environment**

Not applicable.

### **14.6. Special precautions for users**

Not applicable.

### **14.7. Bulk transport according to Annex II of the MARPOL Convention and the IBC Code**

Not applicable.

## ***SECTION 15: Regulatory information***

### **15.1. Safety, health and environmental regulations specific to the substance or mixture**

1. The Act of February 25, 2011 on chemical substances and their mixtures (Journal of Laws No. 63, item 322 with later amendments).
2. Regulation of the Minister of Labour and Social Policy of June 6, 2014 on the highest permissible concentrations and intensities of factors harmful to health in the work environment (Journal of Laws of 2014, item 817).
3. The Waste Act of December 14, 2012 (Journal of Laws 2013, item 21 with subsequent amendments).
4. The Act of June 13, 2013 on the management of packaging and packaging waste (Journal of Laws 2013, item 888).
5. Regulation of the Minister of Environmental Protection of December 9, 2014 regarding the waste catalogue (Journal of Laws of 2014, item 1923).
6. Regulation of the Minister of Economy of December 21, 2005 on essential requirements for personal protective equipment (Journal of Laws No. 259, item 2173).
7. ADR European Agreement concerning the international carriage of dangerous goods by road.
8. 1907/2006/EC Regulation on the Registration, Evaluation, Authorization and Use of Chemical Restrictions (REACH), establishing the European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No. 793/93 and 1488/94, as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including later amendments.
9. 2015/830/EC Commission Regulation of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH).
10. 1272/2008/EC Regulation of the European Parliament and Council of 16 December 2008 on the classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC and amending Regulation (EC) No. 1907/2006 with later amendments.
11. 2008/98/EC Directive of the European Parliament and Council of 19 November 2008 on waste and repealing certain directives.
12. 94/62/EC Directive of the European Parliament and Council of 20 December 1994 on packaging and packaging waste.
13. Directive (EU) 2018/851 of the European Parliament and of the Council of 30 May 2018 amending Directive 2008/98/EC on waste.

### **15.2. Chemical safety assessment**

The product has been positively evaluated by the National Institute of Hygiene.



**ORZEŁ S.A.**

Ul. Przemysłowa 50  
24-320 Poniatowa,  
tel. (81) 475 57 00, fax. (81) 475 57 09



**ZAKŁAD PRODUKCJI  
GRANULATU GUMOWEGO  
TIRE RECYCLING PLANT**

[www.orzelsa.com](http://www.orzelsa.com)

***SECTION 16: Other information***

The above information is considered to be correct but not exhaustive and should only be used as an indication.

In the event the conditions of use of the product are beyond the control of the manufacturer, the responsibility for the safe use of the product is born by the user. When mixing with other substances, it is necessary to make sure no additional hazards arise.

ORZEŁ SA company is not liable for any damages resulting from the use of the information contained herein, work or contact with the above product. The safety data sheet describes the product regards health and safety at work. This information does not constitute a guarantee of the product's properties. The employer is obliged to inform employees working with the product about hazards and personal protection measures specified in the safety data sheet.