

# OSSEOPLUS®



**Commercial Name:** OSSEOPLUS® Bone Graft

**OSSEOPLUS®** is a registered trademark of JHS Laboratório Químico Ltda

**Technical Name:** Bone Graft

**ANVISA Register n°:** 80149980012

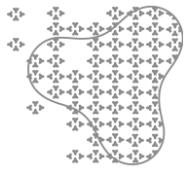
**AFE/ANVISA n°:** 9904LHMY57H9 (8.01499.8)

**TECHNICAL RESPONSIBLE:** DÁMIANA MÁXIMO BRANDÃO - CRF/MG: 26.315

**Sterile product in ethylene oxide**



Conditions for storage, conservation and / or handling, warnings and / or precautions, technical characteristics and instructions for use: See Instructions for Use.



## PRODUCT DESCRIPTION:

In order to meet the needs of the market, JHS Biomaterials has developed a product with chemical characteristics similar to those existing in living organisms.

The bone is composed of rigid inorganic matrices, strengthened by deposits of calcium salts. The middle bone contains, by weight, about 30% matrix and 70% salts. The bone graft synthesized by JHS Biomaterials aims to provide calcium phosphate salts to strengthen the inorganic matrix. This synthetic bone graft commercially called **OSSEOPLUS®** was developed with the following characteristics: to be biocompatible and biofunctional. The osteoconduction promoted by **OSSEOPLUS®** occurs due to the product's ability to be phagocytosed by osteoclasts acting as a bone matrix assisting in osteogenesis, thus it is possible to verify the presence of osteoclasts and osteoblasts (bone cells), making the product a support for cell invasion. As a result, **OSSEOPLUS®** is biodegradable due to the action of osteoclasts on the product, thus leading to bone formation.

**OSSEOPLUS®** is indicated for medical and dental use with the objective of assisting bone neoformation, stimulating the action of fibroblasts, osteoclasts and osteoblasts.

The graft after implantation provides regeneration and restoration of the injured area, which is absorbed by the body. The absorption time varies from patient to patient depending also on the skeletal system to which it was grafted.

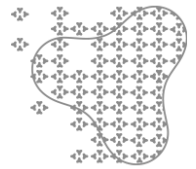
## COMPOSITION:

**OSSEOPLUS®** consists of:

- $\geq 60\%$  Hydroxyapatite
- $\leq 40\%$  Calcium phosphates

## INDICATION:

It is indicated for filling and restoring bone losses, as well as for the maintenance of anatomical structures (bone part), maxillofacial reconstruction; filling of bone cavities in



regions resulting from injuries, segmental losses, sinking, dehiscence, pseudoarthrosis, bone infectious processes, osteomyelitis, osteolysis, cysts and tumors; filling of the alveolar crest due to atrophies; filling of the maxillary sinus; base of the maxillary sinus; periodontal intraosseous injuries; periapical injuries; substitute for uninfected surgical bone defect; defects after surgical removal and corrective osteotomies; reconstructive surgery of injured bone areas; arthrodesis (vertebral arthrodesis with the help of Cage); aesthetic repairs of bone.

Thus it has applications and indications, for bone formation, in the areas of orthopedics and traumatology, neurosurgery, surgery and traumatology, buccomaxillofacial, bone reconstructive plastic surgery, cranial-facial surgery, dental surgery, ophthalmology, otolaryngology.

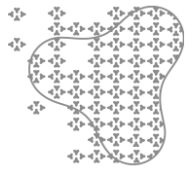
#### **HOW TO USE:**

Exclusive use by qualified professionals (doctors and dentists) and with knowledge of surgical and grafting techniques;

The patient must undergo preoperative evaluation so that the best set of materials and surgical techniques are determined for the use of the product;

**OSSEOPLUS®** must be used in an aseptic environment;

- It is supplied in a sterile state and must be opened in an aseptic environment (surgical, ambulatory, dental office or medical clinic) at the time of application;
- After necessary surgical techniques, prepare the recipient bed so that the product is applied in contact with the healthy and bleeding bone. Necrotic areas with infection must be treated before grafting the material;
- Use only support materials and sterile surgical instruments.
- Direct application of Osseoplus® to the site to be grafted is recommended;
- The surgeon must adopt classic prophylactic treatment described in the literature for immediate and late pre- and postoperative periods.
- It is recommended to use a maximum of 30.0 grams of product per procedure. If there is a need to use an amount greater than the maximum recommended, the professional must analyze the risk / benefit, being the responsibility of the same to adopt the amount to be used.



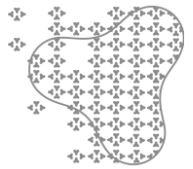
## PRECAUTIONS:

- Check the information regarding the validity of the product, as well as the integrity of the packaging;
- The product is for single use, marketed sterile ready for use, packaged so that it can be used only once, without the need to be processed for use;
- Do not use the product if it has expired;
- If the product (packaging) has been dropped, damaged, tampered with, has been poorly stored and / or handled, it must not be used and must be returned or manufactured or disposed of correctly. However, the final judgment as to the adequacy of the graft is always the surgeon who uses it;
- The surgical use of **OSSEOPLUS®** is restricted to qualified professionals, with knowledge of the surgical techniques and procedures indicated; since improper application can result in relative failure and / or migration of the product.
- Preoperative evaluation, the correct indication of materials and the use of compatible surgical techniques and procedures, as well as postoperative monitoring and controls, are essential for the desirable results.
- As it is a sterile product, the packaging (surgical-grade paper) should only be opened at the time of use. Its use requires appropriate asepsis techniques;
- The region that will receive the product must be exposed and curetted, where the infected and / or necrotic tissues must have been removed;
- Use only support materials and sterile surgical instruments.

**STERILE PRODUCT, SINGLE USE ( ⓧ ), STERILE PRODUCT, SINGLE USE DO NOT REUSE, DO NOT RESTERILIZE, DO NOT REPROCESS, DO NOT USE IF THE EXPIRATION DATE IS EXPIRED OR THE PACKAGE IS VIOLATED.**

## RESTRICTIONS:

The product can only be used by professionals trained in the surgical area (dentists and doctors).



- Graft load restrictions

This product is not designed to withstand load. Repetitive efforts, stress, support/loading activities can result in fractures or damage to the implanted area.

This product cannot be screwed and / or used as an implant support base.

- Bone Support

The product must be grafted into a healthy and bleeding bone region, the quality of the bone region must be estimated at the time of surgery. The bone region is decisive for the success of the product. The evaluation of bone support must be made by the surgeon, for each patient.

- Combination with implants

The product can be used with metallic implants. The need to use and combine these products is at the surgeon's discretion.

- Utilization

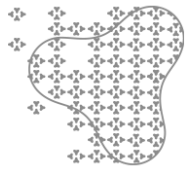
The product can only be used if it is within the expiration date, has been stored as intended and with its full packaging.

It is recommended to use a maximum of 30.0 grams of product per procedure.

If there is a need to use a quantity greater than the stipulated one, it must be determined previously, being the responsibility of the professional to adopt the additional quantity to be used.

**WARNING:**

- Only qualified medical and dental professionals with full knowledge of the necessary surgical and asepsis techniques can use the product;
- The surgical techniques adopted and the material used are the surgeon's responsibility;
- Unused product (surplus) in the surgical procedure must be disposed of, disposed of as hospital waste.

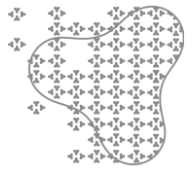


- **OSSEOPLUS®** is a product manufactured in order to facilitate its handling during surgery, but it is **IMPORTANT** to note that it is friable, liable to deformation, but its physical-chemical characteristics, as well as its biocompatibility and biofunctionality **NO ARE CHANGED**, when any change in its format occurs;
- **OSSEOPLUS®** in one piece (tablet, disc, wedge, parallelepiped, cube, stopper and cylinder), cannot be screwed and / or used as an implant support base, since they are friable and their shapes are sole purpose of facilitating their handling.
- The patient's ability and willingness to follow medical recommendations is of paramount importance for the success of the graft. Patients affected by senility, mental illness, alcoholism, and drug abuse may be at high risk of failure of the procedure, as they are more likely to ignore the recommendations and restrictions.
- **OSSEOPLUS®** has a blue-green tint, if it is different, do not use the product and contact the manufacturer;
- To patients: Physical activities are restricted during the recovery period, and must be evaluated by the surgeon, according to the type of surgery, extent of the lesion and place of application.
- The patient must abstain from smoking, alcoholic beverages and drugs of abuse, for a period of at least 4 weeks, with the surgeon being able to change this period.

**STERILE PRODUCT, SINGLE USE (☒), DO NOT REUSE, DO NOT RESTERILIZE, DO NOT REPROCESS, DO NOT USE IF THE VALIDITY IS EXPIRED OR THE PACKAGE IS VIOLATED.**

#### **CONTRAINDICATIONS:**

- The product should not be used in case of infection (acute or chronic) and / or inflammation, especially at the surgery site.
- Do not use **OSSEOPLUS®** in the presence of infected and / or necrotic tissues not removed.
- No tests were performed on pregnant women, lactating women, so use in this group is not recommended.
- Patient with immature skeletal development (bone immaturity).
- Applications to support efforts.



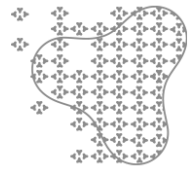
- Surrounding bone is not viable or unable to support or support graft.
- Metabolic and / or inflammatory disease that can prevent bone formation.
- Immunological and / or systemic disorders that hinder wound healing or calcium metabolism.
- Severe neurological or vascular diseases.
- Uncooperative patients who are unwilling or unable to follow postoperative instructions, including individuals who use drugs or alcohol.
- Smoking patients.
- Patients who use drugs and / or alcohol.
- In immunosuppressed patients, with diabetes mellitus, in corticosteroid therapy or affected by diseases that lead to bone demineralization, they may not present predictable results, due to the patient's own systemic involvement.
- The product is aimed at bone formation, studies on aesthetic surgeries (subcutaneous filling, among others) have not been carried out, so the product is not indicated and should not be used for procedures other than bone formation.
- All cases not included in the indications.

#### **ADVERSE EFFECTS:**

In the safety studies, no adverse effects were found. Common complications in implant surgery (grafting) can occur as:

- Infection;
- Sepsis;
- Swelling;
- Osteomyelitis;
- Pain in the first days after grafting at the same site;
- Anesthetic-related complications.

In the event of adverse effects related to the product, it is necessary to contact the manufacturer JHS Biomaterials by calling +55 (31) 3484-9355. It is possible to proceed, also with the notification of these in the competent sanitary organ, ANVISA.



### **STORAGE CONDITIONS, TRANSPORT AND HANDLING:**

- It must be transported and stored away from direct sunlight, sources of heat and humidity;
- The product should preferably be kept at a temperature of 15-30 ° C and a maximum relative humidity of 80%;
- It must be stored in order to maintain the physical integrity of the packaging, without damaging it;
- No heavy or sharp objects should be placed on or near the product, as this may damage its packaging and endanger the physical integrity and sterility of the product;
- As it is a sterile product, the packaging should only be opened at the time of use. Its use requires appropriate asepsis techniques;
- When expired or the packaging is violated, the product must be discarded and its packaging must be uncharacterized;
- Ensure that the storage environment is free of dust and bad weather that may affect the conservation of the stored product.

### **DISPOSAL CONDITIONS:**

**OSSEOPLUS**<sup>®</sup> d according to RDC 222 of 2018 generates Group D waste and because it is used in a surgical environment it must be disposed of in hospital waste.

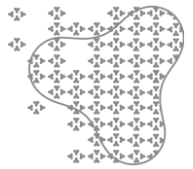
### **STERILIZATION AND VALIDITY:**

**OSSEOPLUS**<sup>®</sup> can be sterilized by Ethylene Oxide or Gamma Radiation, the sterilization method submitted to the product must be checked on its labels.

The validity date of the product is two (2) years after sterilization. This information is contained on the cartridge, product label and control labels.

The cartridge is not sterile, the sterile items are those stored inside the surgical grade paper.





## **TRACEABILITY:**

Within the packages, 5 (five) labels are provided, according to the applicable legislation through resolution nº 1804 of 11/09/2006 of the Federal Council of Medicine, and these must be filed:

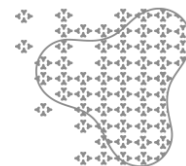
- In the patient's medical record;
- In the report delivered to the patient;
- In the tax documentation that generates the collection at AIH, in the case of a patient treated by SUS, or in the sales invoice, in the case of a patient treated by the complementary health system;
- With the company that supplied it - distributor (historical distribution record - RHD);
- With the surgeon in charge.

The labels contain the following information:


- Commercial name;
- Identification of the manufacturer / company logo;
- Product code;
- Lot number;
- Registration number with ANVISA;
- Product presentation.

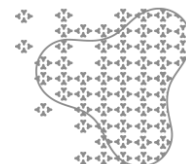
Once opened, the labels must be attached to their respective locations. The surgeon must inform the patient of the existence of the labels, the information contained and instruct him to keep it.


*NOTA: Os cirurgiões-dentista, ao utilizarem o material deverão proceder da forma como descrito acima, a rastreabilidade do produto depende das etiquetas supracitadas.*

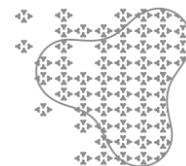



**APRESENTAÇÕES:**

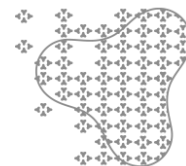
Apresentação	Granulometria			Peso	Código de referência	Demonstração
	Mesh	µm	mm			
Macia	≤10	≈2000	≈2,00	0,5g	P05G10	
				1,0g	P10G10	
				2,0g	P20G10	
				3,0g	P30G10	
				4,0g	P40G10	
				5,0g	P50G10	
				6,0g	P60G10	
				7,0g	P70G10	
				8,0g	P80G10	
				9,0g	P90G10	
				10,0g	P100G10	
				0,5cc	P05C10	
				1,0cc	P10C10	
				2,0cc	P20C10	
				3,0cc	P30C10	
				4,0cc	P40C10	
				5,0cc	P50C10	
				6,0cc	P60C10	
				7,0cc	P70C10	
				8,0cc	P80C10	
9,0cc	P90C10					
10,0cc	P100C10					
15,0cc	P150C10					
20,0cc	P200C10					




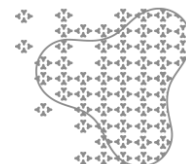
Apresentação	Granulometria			Peso	Código de referência	Demonstração
	Mesh	µm	mm			
Macia	≤20	≈841	≈0,841	0,5g	P05G20	
				1,0g	P10G20	
				2,0g	P20G20	
				3,0g	P30G20	
				4,0g	P40G20	
				5,0g	P50G20	
				6,0g	P60G20	
				7,0g	P70G20	
				8,0g	P80G20	
				9,0g	P90G20	
				10,0g	P100G20	
				0,5cc	P05C20	
				1,0cc	P10C20	
				2,0cc	P20C20	
				3,0cc	P30C20	
				4,0cc	P40C20	
				5,0cc	P50C20	
				6,0cc	P60C20	
				7,0cc	P70C20	
				8,0cc	P80C20	
9,0cc	P90C20					
10,0cc	P100C20					
15,0cc	P150C20					
20,0cc	P200C20					




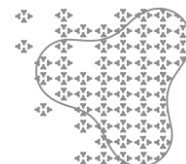
Apresentação	Granulometria			Peso	Código de referência	Demonstração
	Mesh	µm	mm			
Macia	≤30	≈595	≈0,595	0,5g	P05G30	
				1,0g	P10G30	
				2,0g	P20G30	
				3,0g	P30G30	
				4,0g	P40G30	
				5,0g	P50G30	
				6,0g	P60G30	
				7,0g	P70G30	
				8,0g	P80G30	
				9,0g	P90G30	
				10,0g	P100G30	
				0,5cc	P05C30	
				1,0cc	P10C30	
				2,0cc	P20C30	
				3,0cc	P30C30	
				4,0cc	P40C30	
				5,0cc	P50C30	
				6,0cc	P60C30	
				7,0cc	P70C30	
				8,0cc	P80C30	
9,0cc	P90C30					
10,0cc	P100C30					
15,0cc	P150C30					
20,0cc	P200C30					




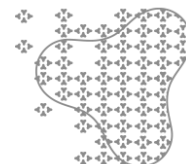
Apresentação	Granulometria			Peso	Código de referência	Demonstração
	Mesh	µm	mm			
Dura	≤10 a 30	≈2000 a ≈595	≈2,00 a ≈0,595	0,5g	P05GD	
				1,0g	P10GD	
				2,0g	P20GD	
				3,0g	P30GD	
				4,0g	P40GD	
				5,0g	P50GD	
				6,0g	P60GD	
				7,0g	P70GD	
				8,0g	P80GD	
				9,0g	P90GD	
				10,0g	P100GD	
				0,5cc	P05CD	
				1,0cc	P10CD	
				2,0cc	P20CD	
				3,0cc	P30CD	
				4,0cc	P40CD	
				5,0cc	P50CD	
				6,0cc	P60CD	
				7,0cc	P70CD	
				8,0cc	P80CD	
				9,0cc	P90CD	
				10,0cc	P100CD	
15,0cc	P150CD					
20,0cc	P200CD					




Apresentação	Granulometria			Peso	Código de referência	Demonstração
	Mesh	µm	mm			
Dura	≤10	≈2000	≈2,00	0,5g	P05D10	
				1,0g	P10D10	
				2,0g	P20D10	
				3,0g	P30D10	
				4,0g	P40D10	
				5,0g	P50D10	
				6,0g	P60D10	
				7,0g	P70D10	
				8,0g	P80D10	
				9,0g	P90D10	
				10,0g	P100D10	
				0,5cc	P05CD10	
				1,0cc	P10CD10	
				2,0cc	P20CD10	
				3,0cc	P30CD10	
				4,0cc	P40CD10	
				5,0cc	P50CD10	
				6,0cc	P60CD10	
				7,0cc	P70CD10	
				8,0cc	P80CD10	
				9,0cc	P90CD10	
				10,0cc	P100CD10	
15,0cc	P150CD10					
20,0cc	P200CD10					

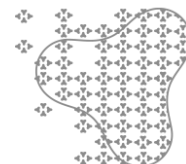


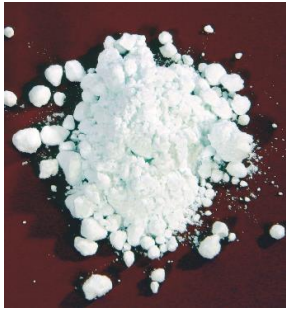
Apresentação	Granulometria			Peso	Código de referência	Demonstração
	Mesh	µm	mm			
Dura	≤20	≈841	≈0,841	0,5g	P05D20	
				1,0g	P10D20	
				2,0g	P20D20	
				3,0g	P30D20	
				4,0g	P40D20	
				5,0g	P50D20	
				6,0g	P60D20	
				7,0g	P70D20	
				8,0g	P80D20	
				9,0g	P90D20	
				10,0g	P100D20	
				0,5cc	P05CD20	
				1,0cc	P10CD20	
				2,0cc	P20CD20	
				3,0cc	P30CD20	
				4,0cc	P40CD20	
				5,0cc	P50CD20	
				6,0cc	P60CD20	
				7,0cc	P70CD20	
				8,0cc	P80CD20	
9,0cc	P90CD20					
10,0cc	P100CD20					
15,0cc	P150CD20					
20,0cc	P200CD20					

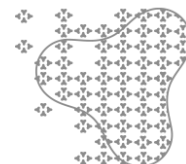



Apresentação	Granulometria			Peso	Código de referência	Demonstração
	Mesh	µm	mm			
Dura	≤30	≈595	≈0,595	0,5g	P05D30	
				1,0g	P10D30	
				2,0g	P20D30	
				3,0g	P30D30	
				4,0g	P40D30	
				5,0g	P50D30	
				6,0g	P60D30	
				7,0g	P70D30	
				8,0g	P80D30	
				9,0g	P90D30	
				10,0g	P100D30	
				0,5cc	P05CD30	
				1,0cc	P10CD30	
				2,0cc	P20CD30	
				3,0cc	P30CD30	
				4,0cc	P40CD30	
				5,0cc	P50CD30	
				6,0cc	P60CD30	
				7,0cc	P70CD30	
				8,0cc	P80CD30	
9,0cc	P90CD30					
10,0cc	P100CD30					
15,0cc	P150CD30					
20,0cc	P200CD30					

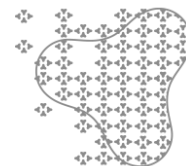


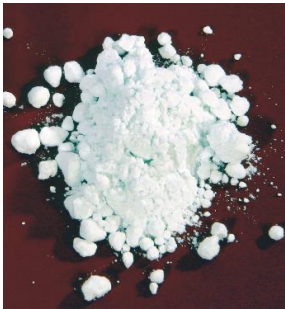


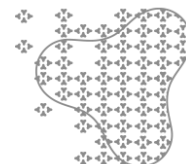
Apresentação	Granulometria			Peso	Código de referência	Demonstração
	Mesh	µm	mm			
Duríssima	≤10 a 30	≈2000 a ≈595	≈2,00 a ≈0,595	0,5g	P05GDR	
				1,0g	P10GDR	
				2,0g	P20GDR	
				3,0g	P30GDR	
				4,0g	P40GDR	
				5,0g	P50GDR	
				6,0g	P60GDR	
				7,0g	P70GDR	
				8,0g	P80GDR	
				9,0g	P90GDR	
				10,0g	P100GDR	
				0,5cc	P05CDR	
				1,0cc	P10CDR	
				2,0cc	P20CDR	
				3,0cc	P30CDR	
				4,0cc	P40CDR	
				5,0cc	P50CDR	
				6,0cc	P60CDR	
				7,0cc	P70CDR	
				8,0cc	P80CDR	
9,0cc	P90CDR					
10,0cc	P100CDR					
15,0cc	P150CDR					
20,0cc	P200CDR					




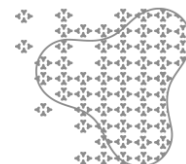
Apresentação	Granulometria			Peso	Código de referência	Demonstração
	Mesh	µm	mm			
Duríssima	≤10	≈2000	≈2,00	0,5g	P05DR10	
				1,0g	P10DR10	
				2,0g	P20DR10	
				3,0g	P30DR10	
				4,0g	P40DR10	
				5,0g	P50DR10	
				6,0g	P60DR10	
				7,0g	P70DR10	
				8,0g	P80DR10	
				9,0g	P90DR10	
				10,0g	P100DR10	
				0,5cc	P05CDR10	
				1,0cc	P10CDR10	
				2,0cc	P20CDR10	
				3,0cc	P30CDR10	
				4,0cc	P40CDR10	
				5,0cc	P50CDR10	
				6,0cc	P60CDR10	
				7,0cc	P70CDR10	
				8,0cc	P80CDR10	
9,0cc	P90CDR10					
10,0cc	P100CDR10					
15,0cc	P150CDR10					
20,0cc	P200CDR10					

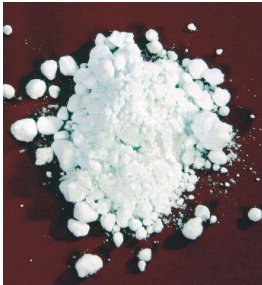


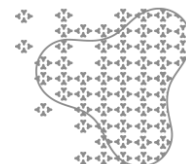
Apresentação	Granulometria			Peso	Código de referência	Demonstração
	Mesh	µm	mm			
Duríssima	≤20	≈841	≈0,841	0,5g	P05DR20	
				1,0g	P10DR20	
				2,0g	P20DR20	
				3,0g	P30DR20	
				4,0g	P40DR20	
				5,0g	P50DR20	
				6,0g	P60DR20	
				7,0g	P70DR20	
				8,0g	P80DR20	
				9,0g	P90DR20	
				10,0g	P10GDR20	
				0,5cc	P05CDR20	
				1,0cc	P10CDR20	
				2,0cc	P20CDR20	
				3,0cc	P30CDR20	
				4,0cc	P40CDR20	
				5,0cc	P50CDR20	
				6,0cc	P60CDR20	
				7,0cc	P70CDR20	
				8,0cc	P80CDR20	
9,0cc	P90CDR20					
10,0cc	P100CDR20					
15,0cc	P150CDR20					
20,0cc	P200CDR20					




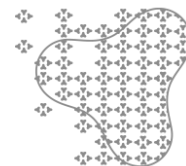
Apresentação	Granulometria			Peso	Código de referência	Demonstração
	Mesh	µm	mm			
Duríssima	≤30	≈595	≈0,595	0,5g	P05DR30	
				1,0g	P10DR30	
				2,0g	P20DR30	
				3,0g	P30DR30	
				4,0g	P40DR30	
				5,0g	P50DR30	
				6,0g	P60DR30	
				7,0g	P70DR30	
				8,0g	P80DR30	
				9,0g	P90DR30	
				10,0g	P100DR30	
				0,5cc	P05CDR30	
				1,0cc	P10CDR30	
				2,0cc	P20CDR30	
				3,0cc	P30CDR30	
				4,0cc	P40CDR30	
				5,0cc	P50CDR30	
				6,0cc	P60CDR30	
				7,0cc	P70CDR30	
				8,0cc	P80CDR30	
9,0cc	P90CDR30					
10,0cc	P100CDR30					
15,0cc	P150CDR30					
20,0cc	P200CDR30					




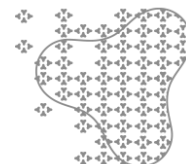
Apresentação	Granulometria			Peso	Código de referência	Demonstração
	Mesh	µm	mm			
Duo Dura 50 (50% Dura e 50% Macia)	≤10	≈ 2000	≈ 2,00	0,5g	P05D10M50	
				1,0g	P10D10M50	
				2,0g	P20D10M50	
				3,0g	P30D10M50	
				4,0g	P40D10M50	
				5,0g	P50D10M50	
				6,0g	P60D10M50	
				7,0g	P70D10M50	
				8,0g	P80D10M50	
				9,0g	P90D10M50	
				10,0g	P100D10M50	
				0,5cc	P05CD10M50	
				1,0cc	P10CD10M50	
				2,0cc	P20CD10M50	
				3,0cc	P30CD10M50	
				4,0cc	P40CD10M50	
				5,0cc	P50CD10M50	
				6,0cc	P60CD10M50	
				7,0cc	P70CD10M50	
				8,0cc	P80CD10M50	
				9,0cc	P90CD10M50	
				10,0cc	P100CD10M50	
15,0cc	P150CD10M50					
20,0cc	P200CD10M50					




Apresentação	Granulometria			Peso	Código de referência	Demonstração
	Mesh	µm	mm			
Duo Dura 50 (50% Dura e 50% Macia)	≤20	≈ 841	≈ 0,841	0,5g	P05D20M50	
				1,0g	P10D20M50	
				2,0g	P20D20M50	
				3,0g	P30D20M50	
				4,0g	P40D20M50	
				5,0g	P50D20M50	
				6,0g	P60D20M50	
				7,0g	P70D20M50	
				8,0g	P80D20M50	
				9,0g	P90D20M50	
				10,0g	P100D20M50	
				0,5cc	P05CD20M50	
				1,0cc	P10CD20M50	
				2,0cc	P20CD20M50	
				3,0cc	P30CD20M50	
				4,0cc	P40CD20M50	
				5,0cc	P50CD20M50	
				6,0cc	P60CD20M50	
				7,0cc	P70CD20M50	
				8,0cc	P80CD20M50	
9,0cc	P90CD20M50					
10,0cc	P100CD20M50					
15,0cc	P150CD20M50					
20,0cc	P200CD20M50					

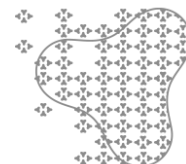



Apresentação	Granulometria			Peso	Código de referência	Demonstração
	Mesh	µm	mm			
Duo Dura 50 (50% Dura e 50% Macia)	≤30	≈ 595	≈ 0,595	0,5g	P05D30M50	
				1,0g	P10D30M50	
				2,0g	P20D30M50	
				3,0g	P30D30M50	
				4,0g	P40D30M50	
				5,0g	P50D30M50	
				6,0g	P60D30M50	
				7,0g	P70D30M50	
				8,0g	P80D30M50	
				9,0g	P90D30M50	
				10,0g	P100D30M50	
				0,5cc	P05CD30M50	
				1,0cc	P10CD30M50	
				2,0cc	P20CD30M50	
				3,0cc	P30CD30M50	
				4,0cc	P40CD30M50	
				5,0cc	P50CD30M50	
				6,0cc	P60CD30M50	
				7,0cc	P70CD30M50	
				8,0cc	P80CD30M50	
9,0cc	P90CD30M50					
10,0cc	P100CD30M50					
15,0cc	P150CD30M50					
20,0cc	P200CD30M50					

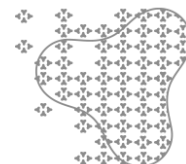



Apresentação	Granulometria			Peso	Código de referência	Demonstração
	Mesh	µm	mm			
Duo Duríssima 50 (50% Duríssima e 50% Macia)	≤10	≈ 2000	≈ 2,00	0,5g	P05DR10M50	
				1,0g	P10DR10M50	
				2,0g	P20DR10M50	
				3,0g	P30DR10M50	
				4,0g	P40DR10M50	
				5,0g	P50DR10M50	
				6,0g	P60DR10M50	
				7,0g	P70DR10M50	
				8,0g	P80DR10M50	
				9,0g	P90DR10M50	
				10,0g	P100DR10M50	
				0,5cc	P05CDR10M50	
				1,0cc	P10CDR10M50	
				2,0cc	P20CDR10M50	
				3,0cc	P30CDR10M50	
				4,0cc	P40CDR10M50	
				5,0cc	P50CDR10M50	
				6,0cc	P60CDR10M50	
				7,0cc	P70CDR10M50	
				8,0cc	P80CDR10M50	
9,0cc	P90CDR10M50					
10,0cc	P100CDR10M50					
15,0cc	P150CDR10M50					
20,0cc	P200CDR10M50					

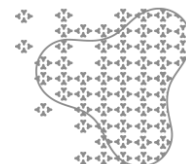





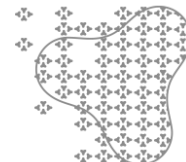
Apresentação	Granulometria			Peso	Código de referência	Demonstração
	Mesh	µm	mm			
Duo Duríssima 50 (50% Duríssima e 50% Macia)	≤20	≈ 841	≈ 0,841	0,5g	P05DR20M50	
				1,0g	P10DR20M50	
				2,0g	P20DR20M50	
				3,0g	P30DR20M50	
				4,0g	P40DR20M50	
				5,0g	P50DR20M50	
				6,0g	P60DR20M50	
				7,0g	P70DR20M50	
				8,0g	P80DR20M50	
				9,0g	P90DR20M50	
				10,0g	P100DR20M50	
				0,5cc	P05CDR20M50	
				1,0cc	P10CDR20M50	
				2,0cc	P20CDR20M50	
				3,0cc	P30CDR20M50	
				4,0cc	P40CDR20M50	
				5,0cc	P50CDR20M50	
				6,0cc	P60CDR20M50	
				7,0cc	P70CDR20M50	
				8,0cc	P80CDR20M50	
9,0cc	P90CDR20M50					
10,0cc	P100CDR20M50					
15,0cc	P150CDR20M50					
20,0cc	P200CDR20M50					

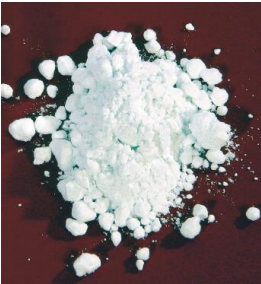


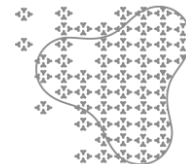
Apresentação	Granulometria			Peso	Código de referência	Demonstração
	Mesh	µm	mm			
Duo Duríssima 50 (50% Duríssima e 50% Macia)	≤30	≈ 595	≈ 0,595	0,5g	P05DR30M50	
				1,0g	P10DR30M50	
				2,0g	P20DR30M50	
				3,0g	P30DR30M50	
				4,0g	P40DR30M50	
				5,0g	P50DR30M50	
				6,0g	P60DR30M50	
				7,0g	P70DR30M50	
				8,0g	P80DR30M50	
				9,0g	P90DR30M50	
				10,0g	P100DR30M50	
				0,5cc	P05CDR30M50	
				1,0cc	P10CDR30M50	
				2,0cc	P20CDR30M50	
				3,0cc	P30CDR30M50	
				4,0cc	P40CDR30M50	
				5,0cc	P50CDR30M50	
				6,0cc	P60CDR30M50	
				7,0cc	P70CDR30M50	
				8,0cc	P80CDR30M50	
9,0cc	P90CDR30M50					
10,0cc	P100CDR30M50					
15,0cc	P150CDR30M50					
20,0cc	P200CDR30M50					




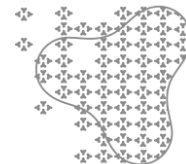
Apresentação	Granulometria			Peso	Código de referência	Demonstração
	Mesh	µm	mm			
Duo Duríssima 70 (70% Duríssima e 30% Macia)	≤10	≈ 2000	≈ 2,00	0,5g	P05DR10M70	
				1,0g	P10DR10M70	
				2,0g	P20DR10M70	
				3,0g	P30DR10M70	
				4,0g	P40DR10M70	
				5,0g	P50DR10M70	
				6,0g	P60DR10M70	
				7,0g	P70DR10M70	
				8,0g	P80DR10M70	
				9,0g	P90DR10M70	
				10,0g	P100DR10M70	
				0,5cc	P05CDR10M70	
				1,0cc	P10CDR10M70	
				2,0cc	P20CDR10M70	
				3,0cc	P30CDR10M70	
				4,0cc	P40CDR10M70	
				5,0cc	P50CDR10M70	
				6,0cc	P60CDR10M70	
				7,0cc	P70CDR10M70	
				8,0cc	P80CDR10M70	
9,0cc	P90CDR10M70					
10,0cc	P100CDR10M70					
15,0cc	P150CDR10M70					
20,0cc	P200CDR10M70					

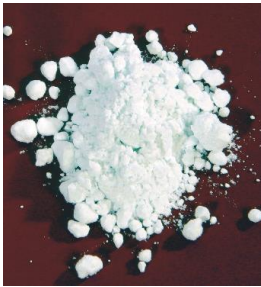


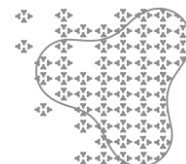
Apresentação	Granulometria			Peso	Código de referência	Demonstração
	Mesh	µm	mm			
Duo Duríssima 70 (70% Duríssima e 30% Macia)	≤20	≈ 841	≈ 0,841	0,5g	P05DR20M70	
				1,0g	P10DR20M70	
				2,0g	P20DR20M70	
				3,0g	P30DR20M70	
				4,0g	P40DR20M70	
				5,0g	P50DR20M70	
				6,0g	P60DR20M70	
				7,0g	P70DR20M70	
				8,0g	P80DR20M70	
				9,0g	P90DR20M70	
				10,0g	P100DR20M70	
				0,5cc	P05CDR20M70	
				1,0cc	P10CDR20M70	
				2,0cc	P20CDR20M70	
				3,0cc	P30CDR20M70	
				4,0cc	P40CDR20M70	
				5,0cc	P50CDR20M70	
				6,0cc	P60CDR20M70	
				7,0cc	P70CDR20M70	
				8,0cc	P80CDR20M70	
9,0cc	P90CDR20M70					
10,0cc	P100CDR20M70					
15,0cc	P150CDR20M70					
20,0cc	P200CDR20M70					




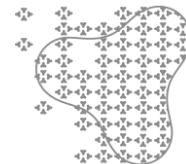
Apresentação	Granulometria			Peso	Código de referência	Demonstração
	Mesh	µm	mm			
Duo Duríssima 70 (70% Duríssima e 30% Macia)	≤30	≈ 595	≈ 0,595	0,5g	P05DR30M70	
				1,0g	P10DR30M70	
				2,0g	P20DR30M70	
				3,0g	P30DR30M70	
				4,0g	P40DR30M70	
				5,0g	P50DR30M70	
				6,0g	P60DR30M70	
				7,0g	P70DR30M70	
				8,0g	P80DR30M70	
				9,0g	P90DR30M70	
				10,0g	P100DR30M70	
				0,5cc	P05CDR30M70	
				1,0cc	P10CDR30M70	
				2,0cc	P20CDR30M70	
				3,0cc	P30CDR30M70	
				4,0cc	P40CDR30M70	
				5,0cc	P50CDR30M70	
				6,0cc	P60CDR30M70	
				7,0cc	P70CDR30M70	
				8,0cc	P80CDR30M70	
9,0cc	P90CDR30M70					
10,0cc	P100CDR30M70					
15,0cc	P150CDR30M70					
20,0cc	P200CDR30M70					




Apresentação	Granulometria			Peso	Código de referência	Demonstração
	Mesh	µm	mm			
Duo Duríssima 80 (80% Duríssima e 20% Macia)	≤10	≈ 2000	≈ 2,00	0,5g	P05DR10M80	
				1,0g	P10DR10M80	
				2,0g	P20DR10M80	
				3,0g	P30DR10M80	
				4,0g	P40DR10M80	
				5,0g	P50DR10M80	
				6,0g	P60DR10M80	
				7,0g	P70DR10M80	
				8,0g	P80DR10M80	
				9,0g	P90DR10M80	
				10,0g	P100DR10M80	
				0,5cc	P05CDR10M80	
				1,0cc	P10CDR10M80	
				2,0cc	P20CDR10M80	
				3,0cc	P30CDR10M80	
				4,0cc	P40CDR10M80	
				5,0cc	P50CDR10M80	
				6,0cc	P60CDR10M80	
				7,0cc	P70CDR10M80	
				8,0cc	P80CDR10M80	
9,0cc	P90CDR10M80					
10,0cc	P100CDR10M80					
15,0cc	P150CDR10M80					
20,0cc	P200CDR10M80					

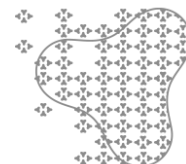



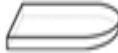





Apresentação	Granulometria			Peso	Código de referência	Demonstração
	Mesh	µm	mm			
Duo Duríssima 80 (80% Duríssima e 20% Macia)	≤20	≈ 841	≈ 0,841	0,5g	P05DR20M80	
				1,0g	P10DR20M80	
				2,0g	P20DR20M80	
				3,0g	P30DR20M80	
				4,0g	P40DR20M80	
				5,0g	P50DR20M80	
				6,0g	P60DR20M80	
				7,0g	P70DR20M80	
				8,0g	P80DR20M80	
				9,0g	P90DR20M80	
				10,0g	P100DR20M80	
				0,5cc	P05CDR20M80	
				1,0cc	P10CDR20M80	
				2,0cc	P20CDR20M80	
				3,0cc	P30CDR20M80	
				4,0cc	P40CDR20M80	
				5,0cc	P50CDR20M80	
				6,0cc	P60CDR20M80	
				7,0cc	P70CDR20M80	
				8,0cc	P80CDR20M80	
9,0cc	P90CDR20M80					
10,0cc	P100CDR20M80					
15,0cc	P150CDR20M80					
20,0cc	P200CDR20M80					



Apresentação	Granulometria			Peso	Código de referência	Demonstração
	Mesh	µm	mm			
Duo Duríssima 80 (80% Duríssima e 20% Macia)	≤30	≈ 595	≈ 0,595	0,5g	P05DR30M80	
				1,0g	P10DR30M80	
				2,0g	P20DR30M80	
				3,0g	P30DR30M80	
				4,0g	P40DR30M80	
				5,0g	P50DR30M80	
				6,0g	P60DR30M80	
				7,0g	P70DR30M80	
				8,0g	P80DR30M80	
				9,0g	P90DR30M80	
				10,0g	P100DR30M80	
				0,5cc	P05CDR30M80	
				1,0cc	P10CDR30M80	
				2,0cc	P20CDR30M80	
				3,0cc	P30CDR30M80	
				4,0cc	P40CDR30M80	
				5,0cc	P50CDR30M80	
				6,0cc	P60CDR30M80	
				7,0cc	P70CDR30M80	
				8,0cc	P80CDR30M80	
9,0cc	P90CDR30M80					
10,0cc	P100CDR30M80					
15,0cc	P150CDR30M80					
20,0cc	P200CDR30M80					





Apresentação	Formato (tamanho)	Unidade/Peso	Código de referência	Demonstração
Comprimido	≥ 2mm	0,5g	P05GCO	
		1,0g	P10GCO	
		2,0g	P20GCO	
		3,0g	P30GCO	
		4,0g	P40GCO	
		5,0g	P50GCO	
		6,0g	P60GCO	
		7,0g	P70GCO	
		8,0g	P80GCO	
		9,0g	P90GCO	
		10,0g	P100GCO	
Disco	≈14 x 14mm	01 unid.	PDG	
	≈12 x 14mm	01 unid.	PDM	
	≈11 x 14 mm	01 unid.	PDP	
Cunha	≈03 x7,5 x 15 x 20 mm	01 unid.	PCP	
	≈08 x 10 x 15 x 25 mm	01 unid.	PCM	
	≈03 x15,5 x15 x 35 mm	01 unid.	PCG	
Paralelepípedo	≈10 x 20 x 10 mm	01 unid.	PPT	
	≈25 x 20 x 05 mm	01 unid.	PPP	
Cubo	≈10 x 10 x 10 mm	01 unid.	PCB	
Rolha (botão)	≈22 x 10 mm	01 unid.	PRH	
Cilindro	≈10 x 10 mm	01 unid.	PCL	

**PRODUZIDO POR:**

Nome fantasia: JHS Biomateriais  
Razão Social: JHS Laboratório Químico LTDA.  
CNPJ: 71.029.631/0001-81  
INDÚSTRIA BRASILEIRA

End.: Rua Ouro Branco, 345 – Bairro Novo Alvorada  
Sabará – Minas Gerais – Brasil – Cep: 34650-120.  
TEL: +55 (31) 3484-9355 / FAX: +55 (31) 3484-9606  
[www.jhs.med.br](http://www.jhs.med.br) / [jhs@jhs.med.br](mailto:jhs@jhs.med.br)