

| Range | fast fermented me | ange of meat cultures contains starter cultures for traditionally and eat products. The range also spans cultures for flavor and color includes mold cultures for surface applications. | | |
|---------------------|--|--|--|--|
| Description | production time. | ulture for production of traditional fermented sausage with a short res a strong and stable color and an aromatic flavor. The yeast adds lopment. | | |
| Taxonomy | Staphylococcus xy Debaryomyces har Lactobacillus sake Staphylococcus ca Pediococcus pent | nsenii i arnosus | | |
| Application | The final pH may b the meat mince. Dosage | The culture is well suited for all fermented sausages with a short production time. The final pH may be regulated by adjusting the amount of fermentable sugars added to the meat mince. | | |
| | 25 g culture for 10 Directions for use Addition to sausag | | | |
| | the bowl chopper | early in the process together with the dry ingredients. | | |
| Physical Properties | Color: | Off-white to brownish | | |
| | Form: | Powder, ground | | |
| | Solubility: | Water soluble suspension | | |

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| Packaging | Material No: 621207 | Size 50x25 g | Type Pouch(es) in box |
|----------------------|--|---------------------|-----------------------------|
| Storage and handling | Temperature: | < -17 °C / < 1 °F | |
| | Conditions: | Dry | |
| Shelf life | For freeze-dried cultures recommendations. | s at least 18 month | ns when stored according to |

When stored at $+5^{\circ}C/41^{\circ}F$ the shelf life is at least 6 weeks.

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Technical Data

Physiological data

| Physiologi | | | | | |
|----------------------------|---------------------------|------------------------|----------------------------|----------------------------|------------------------------|
| Culture Composi tion | Staphylococcus xylosus | Lactobacillus sakei | Staphylococcus carnosus | Pediococcus pentosaceus | Debaryomy ces hansenii |
| Growth | | | | | |
| temp | | | | | |
| Opt/max | 30°C/40°C/10°C | 30°C/45°C/15°C | 30ºC/45ºC/10ºC | 35°C/48°C/15°C | 25°C/35°C/- |
| /min | (86°F/104°F/ | (86°F/113°F/ | (86º/113ºF/ | (95°F/118°F/ | (77°F/95°F/ |
| | 50°F) | 59ºF) | 50ºF) | 59°F) | -) |
| | | | | | |
| Salt limit | 15% salt-in- | 9% salt-in- | 16% salt-in- | 7% salt-in- | 16% salt-in- |
| | water | water | water | water | water |
| Charac | Facultative | Facultative | Facultative | Facultative | Aerobic |
| teristics | anaerobic | anaerobic | anaerobic | anaerobic | |
| | Catalase | DL(+/-)-lactic | Catalase | DL(+/-)-lactic | |
| | positive | acid producing | positive | acid producing | |
| | Nitrate | | Nitrate | | |
| | reductase | | reductase | | |
| | positive | | positive | | |
| | Lipolytic | | Lipolytic | | |
| | Proteolytic | | Proteolytic | | |
| Ferment | | | | | |
| able | | | | | |
| sugars | | | | | |
| Glucose | + | + | + | + | + |
| Fructose | + | + | + | + | |
| Maltose | + | - | - | + | + |
| Lactose | + | - | + | (+) | |
| Saccharo | + | + | - | + | + |
| se | | | | | |
| Starch | - | - | - | - | |
| | | | | | |

Below minimum temperature for growth the strain will still be alive but it will not multiply in the application.

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| | Analytical methods References and analytic | al methods are available on request. |
|-------------------|--|---|
| Legislation | in Regulation 178/2002/E | omply with the general requirements on food safety laid down C. Lactic acid bacteria are generally recognized as safe and wever, for specific applications we recommend to consult |
| | The product is intended | for food use. |
| Food Safety | applications other than | fety is implied or inferred should this product be used in those stated above. Should you wish to use this product in ase contact your Chr. Hansen representative for assistance. |
| Ingredients | See box label. | |
| Labeling | Suggested labeling "lact may vary, please consult | ic acid culture" or "starter culture", however as legislation local legislation. |
| Trademarks | this document, whether symbol are the property | f concepts, logos, brands and other trademarks referred to in or not appearing in large print, bold or with the ® or TM of Chr. Hansen A/S or used under license. Trademarks ent may not be registered in your country, even if they are |
| Dietary status | Kosher: | Kosher Meat Excl. Passover |
| | Halal: | In progress |
| Technical support | Chr. Hansen's Application available if you need fur | n and Product Development Laboratories and personnel are ther information. |

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SM-194

Product Information Version: 4 PI-EU-EN 02-27-2014

GMO Information

In accordance with the legislation in the European Union* we can state that <u>SM-194 does not contain GMOs and does not</u> <u>contain GM labeled raw materials</u>**. In accordance with European legislation on labeling of final food products^{**} we can inform that the use of <u>SM-194 does not trigger a GM labeling</u> of the final food product. Chr. Hansen's position on GMO can be found on: www.chr-hansen.com/About us/Policies and positions/Quality and product safety.

* Directive 2001/18/EC of the European Parliament and of the Council of 12 March 2001 on the deliberate release into the environment of genetically modified organisms and repealing Council Directive 90/220/EEC.

** Regulation (EC) No 1829/2003 of the European Parliament and of the Council of 22 September 2003 on genetically modified food and feed. Regulation (EC) No 1830/2003 of the European Parliament and of the Council of 22 September 2003 concerning the traceability and labeling of genetically modified organisms and the traceability of food and feed products produced from genetically modified organisms and amending Directive 2001/18/EC.

| Allergen Information List of common allergens in accordance with the US Food Allergen Labeling and | Present as an |
|--|---------------|
| Consumer Protection Act of 2004 (FALCPA) and EU labeling Directive 2000/13/EC with | ingredient in |
| ater amendments | the product |
| Cereals containing gluten* and products thereof | No |
| Crustaceans and products thereof | No |
| Eggs and products thereof | No |
| Fish and products thereof | No |
| Peanuts and products thereof | No |
| Soybeans and products thereof | No |
| Milk and products thereof (including lactose) | No |
| Nuts* and products thereof | No |
| List of allergens in accordance with EU labeling Directive 2000/13/EC only | |
| Celery and products thereof | No |
| Mustard and products thereof | No |
| Sesame seeds and products thereof | No |
| Lupine and products thereof | No |
| Mollusks and products thereof | No |
| Sulphur dioxide and sulphites at concentrations of more than | |
| 10 mg/kg or 10 mg/litre expressed as SO ₂ | No |

 * Please consult the EU Labeling Directive 2000/13 Annex IIIa for a legal definition of common allergens, see

European Union law at: www.eur-lex.europa.eu

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