

## Pharmaceutical

Film forming agent, micro-encapsulation, arthritis formulas, tableting and nutritional formulas



# VYSE GELATIN COMPANY

## Nutraceutical & Nutritional

Protein drinks, protein energy bars, joint cartilage, and anti-inflammation supplements



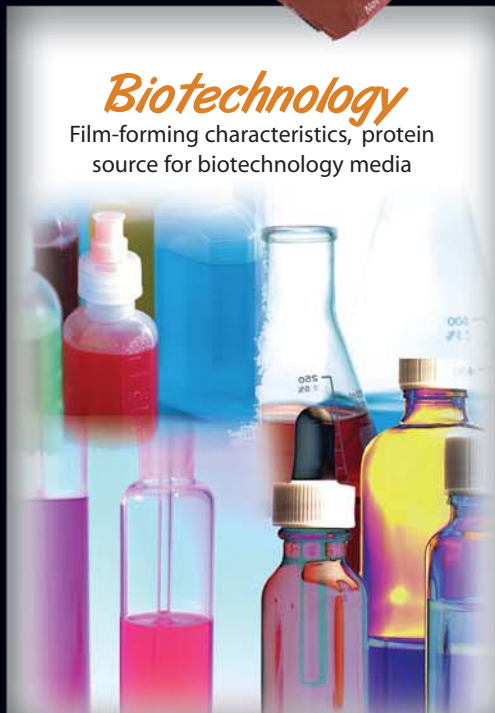
## Food & Drink

Wine, beer and fruit juice clarification, emulsifier and whipping agent, instant drinks and flavorings, micro-encapsulation of flavors and food colors, a substitute for carbohydrates in sweets and other fat containing foods



## Biotechnology

Film-forming characteristics, protein source for biotechnology media



## Cosmetics

Lipstick and fingernail formulas, shampoos and conditioners as "collagen" or "hydrolyzed animal protein"



# Hydrolyzed Gelatin

# Material Safety Data Sheet

## IDENTIFICATION and INFORMATION

Gelatin/Collagen Hydrolysate is a purified protein derived from animal sources. Gelatin/Collagen Hydrolysate is not considered to be hazardous under Federal Hazard Communications Standard 29 CFR 1910.1200. Gelatin/Collagen Hydrolysate has received GRAS Status (Generally Recognized As Safe).

## PHYSICAL/ CHEMICAL CHARACTERISTICS

Gelatin/Collagen Hydrolysate is a cream colored powder which dissolves readily in cold water forming a clear, light-amber solution. Collagen Hydrolysate powder will begin to decompose about 100° C. Complete combustion will occur above 500° C.

## FIRE and EXPLOSION HAZARD DATA

Gelatin/Collagen Hydrolysate is considered non-flammable. In the event of a fire, any standard agents can be used, including water, foam, alcohol foam, CO<sub>2</sub> and dry chemicals.

## REACTIVITY HAZARD DATA

Gelatin/Collagen Hydrolysate is stable and not subject to hazardous polymerization. It is incompatible with strong oxidizing agents.

## HEALTH HAZARD DATA

Gelatin/Collagen Hydrolysate is non-toxic and non-irritating. There is no risk from ingestion, inhalation or from contact with skin or eyes. Masks, gloves or protective eye wear are not required under normal circumstances.

## CONTROL and PROTECTIVE MEASURES

No special clothing or equipment is required when working with Gelatin/Collagen Hydrolysate.

## PRECAUTIONS FOR SAFE HANDLING/ LEAK PROCEDURES

Sweep up any spills. No special disposal methods are needed. Keep away from excessive heat and contact with water.



# COLLAGEN "The Amazing Protein" for your product formulation

Collagen is an important part of our dietary needs. Unfortunately, many of us don't consume enough in our modern diets. It is now widely accepted that this could be the cause of many of our chronic ailments. Examples of arthritis, and painful bone and joint conditions are widespread.

Every day an increasing number of companies are realizing the importance of including collagen in a wide range of products. This has resulted in collagen being found in protein bars, pastas, pizzas, and breads to name a few. The nutraceutical industry is formulating collagen as the main ingredient in many of its bone and joint care products. Several other new applications are currently under development in cosmetic, personal care, and pharmaceutical industries.

Vyse Gelatin has been supplying collagen/gelatin since 1927.

Please contact us for help in improving your products with the addition of "The Amazing Protein".

## Specification Data

Hydrolysate Information	DESCRIPTION	GEL STRENGTH	pH (10% Solution)	ASH	MOISTURE	ODOR & FLAVOR	SOLUBILITY	MICROBIOLOGICAL DATA		
								Total Count	E. coli	Salmonella
<b>BEEF-HIDE GELATIN HYDROLYSATE</b> Our high quality spray dried Hydrolysate derived from Beef Hide Collagen.	<b>BH-000-070-F-G</b> Spray-dried gelatin hydrolysate powder, processed from a purified/sterilized collagen extracted from beef-hide.	Hydrolysis has been carried out sufficiently to prevent solution from gelling.	5.75 ± 0.75	2.0% maximum	8.0% maximum	Not objectionable	Soluble in cold water	<1000 cfu/g	negative	negative
<b>PORK-SKIN GELATIN HYDROLYSATE</b> Our high quality spray dried Hydrolysate derived from Porks skin Collagen.	<b>PS-000-070-F-G</b> Spray-dried gelatin hydrolysate powder, processed from a purified/sterilized collagen extracted from pork-skin.	Hydrolysis has been carried out sufficiently to prevent solution from gelling.	5.75 ± 0.75	2.0% maximum	8.0% maximum	Not objectionable	Soluble in cold water	<1000 cfu/g	negative	negative
<b>FISH GELATIN HYDROLYSATE</b> Our high quality spray dried Hydrolysate derived from Fish Collagen. For applications where a non-mammalian source of Hydrolyzed Protein is necessary.	<b>FS-000-070-F-G</b> Spray-dried gelatin hydrolysate powder, processed from a purified/sterilized collagen extracted from fish skin/scale.	Hydrolysis has been carried out sufficiently to prevent solution from gelling.	5.75 ± 0.75	2.0% maximum	8.0% maximum	Not objectionable	Soluble in cold water	<1000 cfu/g	negative	negative
<b>BEEF-BONE GELATIN HYDROLYSATE</b> Our high quality spray dried Hydrolysate derived from Beef Bone Collagen.	<b>BB-000-070-F-G</b> Spray-dried gelatin hydrolysate powder, processed from a purified/sterilized collagen extracted from beef-bone.	Hydrolysis has been carried out sufficiently to prevent solution from gelling.	5.75 ± 0.75	2.0% maximum	8.0% maximum	Not objectionable	Soluble in cold water	<1000 cfu/g	negative	negative

Hydrolyzed Gelatin derived from collagen is not a complete protein source for mammalian nutrition since it lacks the essential amino acid tryptophan.

This brochure is for informational purposes only. We believe that the information presented and figures listed are true representations of our Gelatin/Collagen Hydrolysates. All labeling information however, should be based on results obtained from appropriate tests performed by the end user and not on information contained herein.



## Nutritional Data

PROTEIN	PROTEIN (Dry Form %)	CARBO-HYDRATES	FATS	CALORIE CONTENT	SODIUM CONTENT	TOTAL DIETARY FIBER	CALCIUM	CHOLESTEROL	VITAMIN A	VITAMIN C	SUGARS	IRON
92% ±2%	≥ 97%	nil	nil	360 cal/100g	≤ 500 mg/100g	nil	≤ 100 mg/100g	nil	nil	nil	nil	≤ 3 mg/100g
92% ±2%	≥ 97%	nil	nil	360 cal/100g	≤ 500 mg/100g	nil	≤ 100 mg/100g	nil	nil	nil	nil	≤ 2 mg/100g
92% ±2%	≥ 97%	nil	≤0.1%	400 cal/100g	≤ 500 mg/100g	nil	nil	nil	nil	nil	nil	≤ 5 mg/100g
92% ±2%	≥ 97%	nil	nil	360 cal/100g	≤ 500 mg/100g	nil	≤ 100 mg/100g	nil	nil	nil	nil	≤ 2 mg/100g



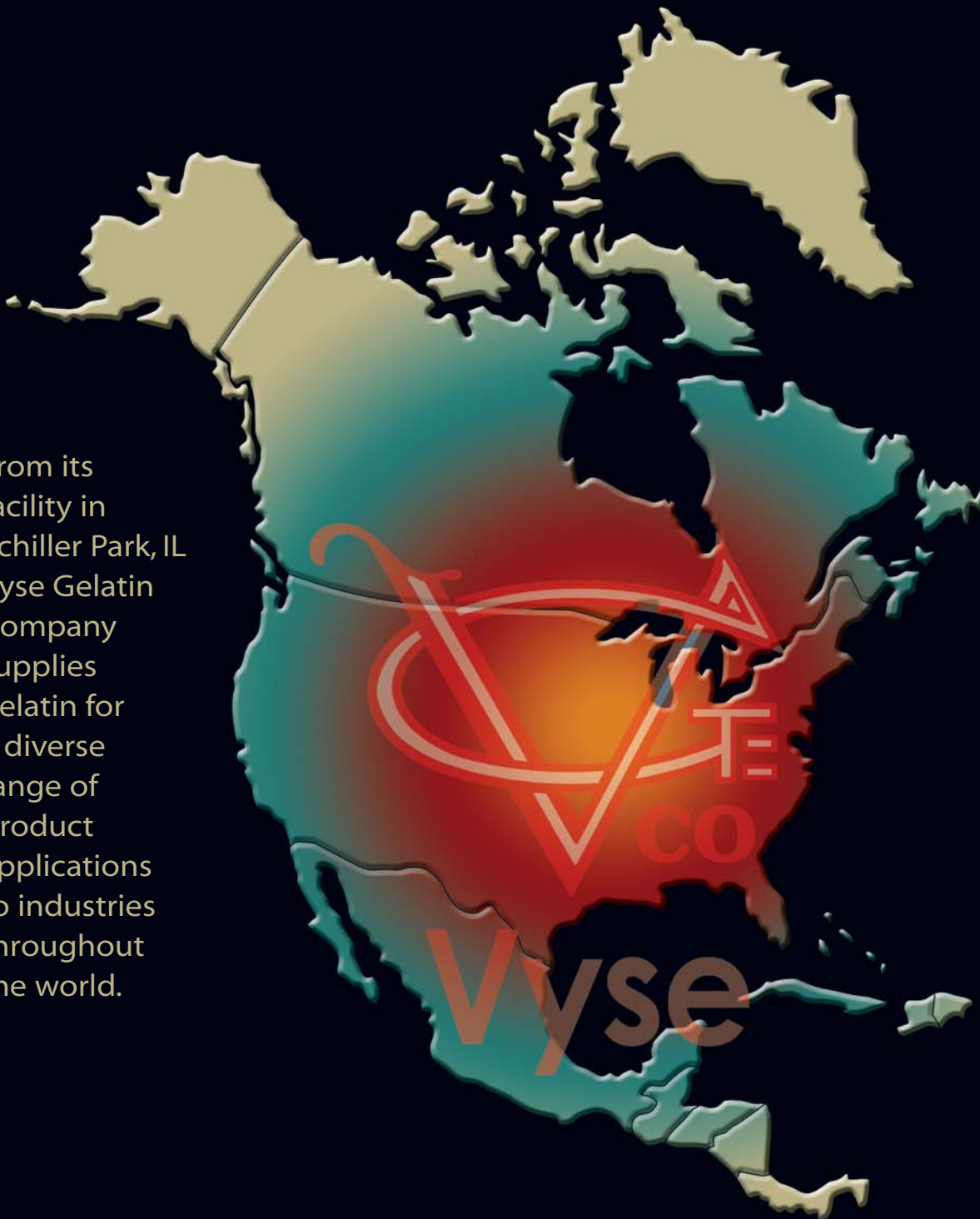


**Amino Acid Profile** % by Weight (obtained by complete hydrolysis of gelatin)

Alanine	Arginine	Aspartic Acid	Cystine	Glutamic Acid	Glycine	Histidine	Hydroxy-lysine	Hydroxy-proline	Isoleucine	Leucine	Lysine	Methio-nine	Ornithine	Phenyl-alanine	Proline	Serine	Threonine	Tyrosine	Valine
8.00-11.0	7.50-8.80	4.50-6.90	Trace	10.00-11.50	19.00-27.50	0.74-1.50	0.50-1.50	12.00-14.50	1.20-1.80	2.50-3.50	2.80-4.80	0.60-0.92	0.00-0.30	1.50-2.56	13.40-18.00	2.90-4.20	1.80-2.20	0.20-1.00	2.20-3.40
8.60-10.70	8.30-9.10	6.20-6.70	0.00-0.10	11.30-11.70	19.30-30.50	0.85-1.50	0.85-1.04	11.90-13.90	1.33-1.90	2.70-3.38	3.40-5.20	0.50-0.92	0.00-0.10	2.10-2.56	13.00-18.00	2.90-4.13	1.60-2.30	0.19-0.92	2.30-2.80
9.10-9.50	8.50-8.90	5.30-5.50	0.46-0.50	8.90-9.30	24.40-25.20	0.41-0.45	0.50-0.70	7.30-7.70	1.40-1.50	2.75-2.90	3.10-3.20	1.45-1.55	0.09-0.13	1.35-1.41	9.30-9.70	3.00-3.15	2.85-3.00	0.56-0.60	2.18-2.32
9.20-11.00	8.50-8.85	6.10-6.95	Trace	10.70-11.50	26.00-27.80	0.72-0.95	0.50-1.50	13.80-14.70	1.20-1.84	2.90-3.50	4.10-4.80	0.60-0.92	0.00-0.30	2.05-2.56	14.20-17.00	2.90-4.30	1.95-2.30	0.20-1.00	2.40-3.60

- VYSE Gelatin Hydrolyzed proteins meet U.S.P./N.F. specifications for gelatin.
- VYSE Gelatin Hydrolyzed proteins can be certified Kosher.

From its facility in Schiller Park, IL Vyse Gelatin Company supplies gelatin for a diverse range of product applications to industries throughout the world.



## **VYSE GELATIN COMPANY**

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