LESAFFRE YEAST CORPORATION

RED STAR®

Pasteur Champagne

ACTIVE DRY WINE YEAST

Product Code:		
	85410	10 Kg Box
	85400	24 X 500 Gram/Case
	66030	1120 X 5 Gram/Case

Product Description:

Red Star® Pasteur Champagne (Davis #595), a strain of *Saccharomyces bayanus*, has been derived from a pure culture slant of the Institute Pasteur in Paris. This strain has been widely used in the U.S. since about 1968. It is a strong fermenter with very good ethanol tolerance, and will readily ferment musts and fruit juices to dryness. This yeast has good tolerance to sulphur dioxide. Its use is recommended for all white wines, some reds and for fruit juices. Although this yeast is somewhat flocculent, it is not commonly used for sparkling wines. Pasteur Champagne has been recommended by several sources for restarting "stuck" fermentations.

Red Star® Active Dry Wine yeast is grown on cane and beet molasses under highly aerobic conditions, which assures better survival of live cells toward the end of the fermentation than yeasts grown in must under anaerobic conditions. All of our wine yeast strains have been adapted to perform well in the presence of normal levels of SO_2. Our yeast is dried under carefully controlled conditions in an airlift drier to assure a high live cell count and to permit ease of rehydration.

Typical Analysis	**Average**	**Reference Method**
Moisture	7.3 - 8.3%	AOAC 27.8.03 961.06
Yeast Live Cell Count	1 - 3 x 10^{10}/g	RS FN 14

Microbiological Specifications	**Maximum**	**Reference Method**
Total Bacterial Count	1.0 x 10^4	BAM CH 3
Coliform Organisms	< 50/g	BAM CH 4
E. coli	< 10/g	BAM CH 4
Malolactic Organisms	≤ 1.0 X 10^4/g	
Salmonella	Negative/375g	BAM CH 6, Appd 1, Table 2

Kosher

Red Star® Active Dry Wine Yeast strains produced in Baltimore, MD are certified Kosher, *including Passover*, by Organized Kashrus Laboratories, Brooklyn, NY. Red Star® Active Dry Wine strains produced in Croatia are certified as Kosher-Pareve by the Chief Rabbi of Croatia.

Preparation:

Red Star® Active Dry Wine Yeast may be used with or without prior rehydration. For best results, add 1 kg. dry yeast to 5-10 liters of water or must at 36°- 39°C (97°- 102°F). After 10-20 minutes, the yeast is ready to use. Yeast activity will be reduced with higher or lower temperatures, or by prolonged soaking. Temper rehydrated yeast by adding small amounts of cool juice prior to inoculating. Warm, freshly rehydrated yeast may not survive inoculation into juice that is significantly colder.

For direct addition at temperatures above 20°C (68°F) the pellets can be sprinkled onto the surface of the liquid followed by agitation, or be added to the pump intake while pumping over.

For sparkling wines, the yeast should be acclimatized to alcohol by first growing it in juice of sweetened diluted wine until ½ the sugar has fermented, then adding it to the production vat.

Usage & Storage:

An average inoculum is 25 grams per 100 liters (2.2 lbs. per 1,000 gal.). This may be doubled for difficult to ferment fruit concentrates or stuck fermentations. One-half the amount may be used for certain fast fermenting table wines. For sparkling wines, the inoculum should be calculated on the final vat size so that the acclimatizing starter step will proceed more rapidly.

Shelf life of unopened vacuum pack at room temperature (20°C, 68°F) is up to 2 years. If kept refrigerated (4°C, 45°F), shelf life will exceed 2 years. After opening, use within 4 weeks. Store an opened package tightly sealed, under refrigeration, removing as much air as possible.

2/04

INGREDIENT INFORMATION

NUTRIENT CONTENTS

Product Name: **Red Star® Wine Yeast**

Product Code: **85117, 85127 ,85150, 85250, 85300,85405, 85410, 85915, 85930, 85980, 66014, 66020, 66026, 66030, 66038, 66088,60039**

Company: **Lesaffre Yeast Corporation**

Address: **433 E. Michigan Street, Milwaukee, WI 53202**

Phone: **(414) 615-4085** **Fax: (414) 615-4003**

Contact Person: **Robert E. Biwersi- Director, Quality Assurance**

Typical Analysis
Information provided on a per 100g 'as is' basis.

Calories: 315-355 Kcal

Moisture: 7.3-8.3 **g**

Protein: 36- 42 **g**

Ash: 4 - 5 **g**

Carbohydrates: 40-46 **g**

- ***Complex:*** 40-46 **g**
- ***Sugars:*** < 0.1 **g**

Vitamin A: < 100 **µg RE**

Vitamin C: < 1 **mg**

Thiamin: 6.4 - 7.4 **mg**

Niacin: 27 - 46 **mg NE**

Riboflavin: 2.8 - 3.6 **mg**

g= gram, mg= milligram, µg = microgram, RE = Retinol Equivalent, NE = Niacin Equivalent and IU= International Units

Ingredient statement: Yeast, sorbitan monostearate

Fat: 4.5 - 6.5 **g**

- ***Saturated:*** 1.1 - 1.5 **g**
- ***Unsaturated*:** 2.7 - 4.9 **g**
  - ***Monounsaturated*:** 2.5-3.5 **g**
  - ***Polyunsaturated*:** < 0.03 **g**
  - ***Trans Fatty Acids*** < 0.05 **g**

Cholesterol: <0.1 **mg**

Dietary Fiber: 13.8 - 15.6 **g**

- ***Soluble*:** 3.2 - 3.6 **g**
- ***Insoluble*:** 10.6 -12 **g**

Iron: 4.1 - 5.3 **mg**

Calcium: 73.6 - 82.8 **mg**

Sodium: 17.5 - 21.1 **mg**

Potassium: 1564-1748 **mg**

Phosphorus: 645-903 **mg**

02/04

LESAFFRE YEAST CORPORATION

ALLERGEN & SENSITIVE COMPONENTS

ITEM: RED STAR® WINE YEAST **PRODUCT CODES: 66014, 66020, 66026, 66030, 66038, 66088, 85115, 85125, 85150, 85200, 85250, 85350, 85400, 85410, 85560, 85780, 85820, 85930, 85980**

ALLERGEN & SENSITIVE COMPONENT	Q#1: PRESENT IN PRODUCT		Q#2: PRESENT ON SAME LINE	
	Yes	**No**	**Yes**	**No**
BARLEY PRODUCTS		X		X
BHA, BHT		X		X
CELERY (root, leaves, stalk)		X		X
CHOCOLATE PRODUCTS		X		X
CORN FLOUR / MEAL		X		X
EGG PRODUCTS (mayonnaise, meringue, ovalbumin, etc.)		X		X
FD & C COLORS (Yellow #5, etc.)		X		X
FISH any type		X		X
HYDROLYZED ANIMAL PROTEIN		X		X
HYDROLYZED PLANT PROTEIN		X		X
3-MCPD (MONOCHLOROPROPYLDIOL)		X		X
MEAT & MEAT DERIVATIVES (beef, pork)		X		X
MILK PRODUCTS (butter, casein, cheese, whey, nougat, malted milk, sour cream, yogurt, etc.)		X		X
MONOSODIUM GLUTAMATE		X		X
OAT PRODUCTS		X		X
PEANUT PRODUCTS		X		X
RYE PRODUCTS		X		X
SEEDS (cottonseed, poppy, sesame, sunflower, etc.)		X		X
SHELL FISH (crustaceans, mollusks, shrimp, crab, lobster, oyster, clam, scallop, crayfish, etc.)		X		X
SOYBEAN PRODUCTS (tofu, miso, soy-derived vegetable protein, etc.)		X		X
SULFITES		X		X
TREE NUT PRODUCTS (almond, cashew, hazelnut, macadamia, pecan, pine, pistachio, walnut, etc.)		X		X
WHEAT PRODUCTS (bran, bread crumbs, cracker meal, farina, graham flour, wheat germ, etc.)		X		X
OTHER:				

Robert E. Biwersi
Director, Quality Assurance
February 2004

MATERIAL SAFETY DATA SHEET
LESAFFRE YEAST CORPORATION
MILWAUKEE, WISCONSIN

IDENTITY ***(As used on Label and List)*** **RED STAR® WINE YEASTS**	***Note: Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.***

Section I - General Information

Manufacturer's Name LESAFFRE YEAST CORPORATION	***Emergency Phone Number*** 800-424-93002
Address (Number, Street, City, State, and ZIP Code) 433 East Michigan Street Milwaukee, WI 53202	***Telephone Number for Information*** (414) 615-4085
	Date Prepared: May, 2001

Section II - Hazard Ingredients/Identity Information

Hazardous Components (Specific Chemical Identity; Common Name(s) (Optional)	OSHA PEL	ACGIH TLV	Other Limits Recommended	%
N/A Yeast is a food grade material.				

Section III - Physical/Chemical Characteristics

Boiling Point	**N/A**	Specific Gravity (H_2O = 1)	**0.5**
Vapor Pressure (mm Hg.)	**N/A**	Melting Point	**N/A**
Vapor Density (AIR = 1)	**N/A**	Evaporation Rate (Butyl Acetate = 1)	**N/A**
Solubility in Water: **Dispersible**			
Appearance and Odor: **Light tan, granular, slight yeasty.**			

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used) **Unknown**	Flammable Limits	LEL	UEL
Extinguishing Media:			
Special Fire Fighting Procedures: **None**			
Unusual Fire and Explosion Hazards: **None**			

Material Safety Data Sheet
RED STAR BASIC WINE YEAST

Section V – Reactivity Data

Stability	Unstable		Conditions to Avoid
	Stable	**X**	
Incompatibility (Materials to Avoid): **None known**			
Hazardous Decomposition or Byproducts: **N/A**			
Hazardous Polymerization	May Occur		Conditions to Avoid:
	Will Not Occur	**X**	

Section VI – Health Hazard Data

Route(s) of Entry: Inhalation? **Y** Skin? **N** Ingestion? **N**
Health Hazards (Acute and Chronic): **None**
Carcinogenicity: **None** NTP? IARC Monographs? OSHA Regulated?
Signs and Symptoms of Exposure: **N/A**
Medical Conditions Generally Aggravated by Exposure: **N/A**
Emergency and First Aid Procedures: **N/A**

Section VII - Precautions for Safe Handling and Use

Steps to Be Taken in Case Material Is Released or Spilled: **No hazard.**
Waste Disposal Method: **No special method**
Precautions to Be Taken in Handling and Storing: **None**
Other Precautions: **None**

Section VIII - Control Measures

Respiratory Protection (Specify Type): **Avoid excessive dust**		
Ventilation:	Local Exhaust	Special
	Mechanical (General)	Other
Protective Gloves:		Eye Protection:
Other Protective Clothing or Equipment: **Face mask if excessive dust is present.**		
Work/Hygienic Practices:		