## **Fermentis**

#### RED STAR® DISTILLER'S ACTIVE DRY YEAST

#### **ITEM 42150**

#### TECHNICAL DATA SHEET

#### **DESCRIPTION:**

Red Star<sup>®</sup> Distillers Active Dry Yeast (DADY) is a specially selected strain of *Saccharomyces cerevisiae* designed for distillers' use in grain mash fermentations for ethanol. DADY will produce maximum alcohol yields under controlled temperatures (less than 90°F, 32°C). DADY has been a proven performer for over 20 years and is the cost conscious choice of many producers in the ethanol industry.

It has been used for the manufacture of light spirit and Whiskeys. It is also used on corn mash and syrup fermentations.

#### **INGREDIENTS:**

Yeast (Saccharomyces cerevisiae), rehydrating agent

#### **APPLICATIONS:**

Industrial fermentation for the production of fuel alcohol from grain mashes is the primary application for this strain. This strain has been used in the fermentation of light whiskeys and neutral spirits. It performs well in the production of ethanol from a variety of carbohydrate sources including: molasses, citrus pulp and corn syrup.

#### **USAGE:**

Pitching levels between 2–4 lbs per 1000 gallons (25-50 g per hectoliter) will give an initial yeast density of approximately 7-14 billion yeast cells per gallon (2.5-5.0 million per ml).

Prior to inoculation, yeast should be rehydrated in 4-5 times its weight of clean water at 104°F (40°C) for 15 minutes.





DADY

**Product Specification** 

Page 2

#### **SPECIFICATIONS:**

Chemical

Dry Matter 94.0 - 97.0% Nitrogen (DB) 6.5 - 7.5% Phosphate 1.6 - 2.2%

Microbiological

SalmonellaNegative / 375gTotal Plate Count $≤ 1 × 10^7 / g$ Viable Yeast Cells≥15 Billion / g

#### **KOSHER:**

**Kosher Pareve** 

#### **PACKAGING**:

Packed in 10 kg vacuum packed bag in a box - Code 42150

#### STORAGE AND SHELF LIFE:

Red Star® Distillers Active Dry Yeast does not require refrigeration; however, DADY will perform best when it is kept cool and dry. Refer to best before end date on box. 24 months from production date under recommended storage conditions. A loss of activity of 1 to 2 % per month can be expected when refrigerated at 50°F. Activity loss will increase to between 8 and 9 % per month when stored at room temperature. Partially used bags need to be tightly covered once opened to minimize moisture pickup and protect product integrity.

To maintain highest activity and to assure best results, Fermentis recommends that purchased quantities be limited to a 3-4 month supply.

10/12

## **INGREDIENT INFORMATION**

#### **NUTRIENT CONTENTS**

Product Name: Red Star® Distillers Active Dry Yeast - (DADY)

Product Code: 42150

Company: <u>Fermentis</u>

Address: 7475 West Main Street, Milwaukee, WI 53214

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:	365-405	
Moisture:	4.5 - 6.5	g
Protein:	38-48	g
Ash:	3.3 - 6.3	g
Carbohydrates	: 36-46	g
• Complex:	36-46	g
Sugars:		
Vitamin A:	< 100	µg RE
Vitamin C:	< 1	mg
Thiamin:	22 -28	mg
Niacin:	24 - 36	mg NE
Riboflavin:	3.3 - 4.6	mg

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

Fat <u>:</u>	4.2 - 7	.6	g
<ul><li>Saturated:</li></ul>	1.1 - 1	.7	g
• Unsaturated	<b>:</b> 3.8 - 5	5.3	g
• Monouns	aturated:_	3.8-5.3	g
• Polyunsa	turated:	< 0.1	g
• Trans Fat	tty <u>Acids</u>	< 0.05	g
Cholesterol:	< 0.1		_mg
Dietary Fiber:	14.3 - 10	5.1	g
• Soluble :	3.3 - 3.	7	g
• Insoluble :	11.0 - 12	2.4	g
Iron:	4.2 - 5.4	<u> </u>	_mg
Calcium:	45 - 65		_mg
Sodium:	75 - 17	5	_mg
Potassium:	1618 - 18	08	_mg
Phosphorus:	774 (64	5-903)	_mg

**Ingredient Statement**: Yeast, sorbitan monostearate

# **Fermentis**

### **ALLERGEN & SENSITIVE COMPONENTS**

ITEM: Red Star® Distillers Active Dry	Yeast	PROD	OUCT CODE: 42150	
ALLERGEN & SENSITIVE COMPONENT	Q#1: PRESENT IN P	RODUCT?	Q#2: PRESENT ON	SAME LINE?
	Yes	No	Yes	No
BARLEY PRODUCTS		X		X
ВНА, ВНТ		X		X
CELERY (root, leaves, stalk)		X		X
CHOCOLATE PRODUCTS		X		X
CORN FLOUR / MEAL		X		X
EGG PRODUCTS (mayonnaise, meringue,		X		X
ovalbumin, etc.)				
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,		X		X
yougat, malted milk, sour cream, yogurt, etc.)				
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,		X		X
lobster, oyster, clam, scallop, crayfish, etc.)				
SOYBEAN PRODUCTS (tofu, miso, soy-derived		X		X
vegetable protein, etc.)				
SULFITES		X		X
TREE NUT PRODUCTS (almond, cashew, hazeln	ut,	X		X
macadamia, pecan, pine, pistachio, walnut, etc.)				
WHEAT PRODUCTS (bran, bread crumbs, cracker	r	X		X
meal, farina, graham flour, wheat germ, etc.)				
OTHER:				

Robert E. Biwersi Director of Quality Assurance October 2012

# MATERIAL SAFETY DATA SHEET FERMENTIS – A BUSINESS UNIT OF LESAFFRE YEAST CORPORATION MILWAUKEE, WISCONSIN

IDENTITY (As used on Label and RED STAR® DISTILLERS ACTIVE Y	•	Note: Blank spaces are not permitem is not applicable, or no informavailable, the space must be mar indicate that.	mation is
Section I - General Information			
Manufacturer's Name Fermentis		Emergency Phone Number 800-424-9300	
Address (Number, Street, City, State Code)		Telephone Number for Information (414) 615-4085	n
7475 West Main Street, Milwaukee, W	I 53214	Data Barraga A. Day 2000	
		Date Prepared: Dec 2006	
Section II - Hazard Ingredients/Iden	tity Informat	tion	
Other Limits Hazardous Components (Specific Ch TLV Recommended % (Optiona		y; Common Name(s) OSHA PEL	ACGIH
No known hazardous materials pre	sent.		
Section III - Physical/Chemical Char	racteristics		
Boiling Point	N/A	Specific Gravity (H <sub>2</sub> O = 1)	0.5
Van an Duagassa (sana Ha)	NI/A	Malking Daint	NI/A
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: <b>Dispersable</b>			
Appearance and Odor: Light tan, gra	nular, slight	veastv	
r pp caramos and coon _ight tan, gro		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	
Cartina IV. Etc. and Employer II.	J D-4-		
Section IV - Fire and Explosion Haz Flash Point (Method Used) Unknown		Flammable Limits	LEL UEL
(	-		
Extinguishing Media:			
Special Fire Fighting Procedures: No	ne		
Unusual Fire and Explosion Hazards:	None		

# Material Safety Data Sheet RED STAR® DISTILLERS ACTIVE YEAST

Stability	Unstabl		Conditions to Avoid	
•	е			
	Stable	Х		
Incompatibil	ity (Materials t	o Avoid): Nor	ne Known	
			- N/A	
Hazardous L	Decomposition	or Byproduct	S: N/A	
Hazardous	May Occ	ur	Conditions to Avoid:	
Polymerizati	on Will Not	Occur X		
Section VI –	Health Haza	rd Data		
Route(s) of E		Inhalation?	Skin?	Ingestion?
Health Hazar	ds (Acute and	Chronic): No	one	
Carcinogenic	itv.	NTP?	IARC Monographs?	OSHA Regulated?
Saromogerno	ity.		i, are monographs:	Corn't regulated:
Signs and Sy	mptoms of Ex	posure:		
Madiaal Can	ditions Consu	III. A manay taka	d by Evenness Avaid ava	
viedicai Cond	altions Genera	illy Aggravated	by Exposure: Avoid exc	cessive dust if product is groun
Emergency a	nd First Aid P	rocedures: No	ormal ventilation	
Emergency a	nd First Aid P	rocedures: No	ormal ventilation	
Section VII -	Precautions	for Safe Han	dling and Use	
Section VII -	Precautions	for Safe Han		zard
Section VII - Steps to Be 1	Precautions Taken in Case	for Safe Hand Material Is Re	dling and Use eleased or Spilled: No haz	zard
Section VII - Steps to Be 1 Waste Dispos	Precautions Taken in Case sal Method: N	for Safe Hand Material Is Re lo special me	dling and Use eleased or Spilled: No haz	zard
Section VII - Steps to Be 1 Waste Dispos	Precautions Taken in Case sal Method: N	for Safe Hand Material Is Re lo special me	dling and Use eleased or Spilled: No haz	zard
Section VII - Steps to Be 1 Waste Dispos Precautions t	Precautions Taken in Case sal Method: No Be Taken in	for Safe Hand Material Is Re lo special me	dling and Use eleased or Spilled: No haz	zard
Section VII - Steps to Be T Waste Dispos Precautions t	Precautions Taken in Case sal Method: No Be Taken in	for Safe Hand Material Is Re lo special me	dling and Use eleased or Spilled: No haz	zard
Section VII - Steps to Be 1 Waste Dispos Precautions to	Precautions Faken in Case sal Method: No Be Taken in tions: None	for Safe Hand Material Is Re lo special me Handling and	dling and Use eleased or Spilled: No haz	zard
Section VII - Steps to Be 1 Waste Dispos Precautions t Other Precau	Precautions Taken in Case sal Method: No To Be Taken in Titions: None - Control Me	for Safe Hand Material Is Re lo special me Handling and easures	dling and Use eleased or Spilled: No haz thod Storing: None	zard
Section VII - Steps to Be 1 Waste Dispos Precautions t Other Precau	Precautions Taken in Case sal Method: No To Be Taken in Titions: None - Control Me	for Safe Hand Material Is Re lo special me Handling and easures	dling and Use eleased or Spilled: No haz	zard
Section VII - Steps to Be 1 Waste Dispos Precautions t Other Precau Section VIII Respiratory F	Precautions Taken in Case sal Method: No To Be Taken in Titions: None - Control Me	for Safe Hand Material Is Re lo special me Handling and easures ecify Type): A	dling and Use eleased or Spilled: No haz thod Storing: None	zard
Section VII - Steps to Be 1 Waste Dispos Precautions t Other Precau Section VIII Respiratory F	Precautions Taken in Case sal Method: No To Be Taken in Titions: None  - Control Method Protection (Specific Control Case) Local Exhau	for Safe Hand Material Is Re lo special me Handling and easures ecify Type): A	dling and Use eleased or Spilled: No haze thod Storing: None  void excessive dust  Special	zard
Section VII - Steps to Be 1 Waste Dispos Precautions t Other Precau Section VIII Respiratory F	Precautions Faken in Case sal Method: Note tions: None Control Me	for Safe Hand Material Is Re lo special me Handling and easures ecify Type): A	dling and Use eleased or Spilled: No haze thod Storing: None	zard
Section VII - Steps to Be 1 Waste Dispos Precautions t Other Precau	Precautions Faken in Case sal Method: Note tions: None Control Me Protection (Spe Local Exhau	for Safe Hand Material Is Re lo special me Handling and easures ecify Type): A	dling and Use eleased or Spilled: No haze thod Storing: None  void excessive dust  Special	
Section VII - Steps to Be To Waste Dispose Precautions to Other Precaution Section VIII Respiratory For Ventilation: Protective Global	Precautions Faken in Case sal Method: Note to Be Taken in tions: None  Control Me Protection (Special Exhaum Mechanical oves:	for Safe Hand Material Is Re lo special me Handling and easures ecify Type): A	dling and Use eleased or Spilled: No haze thod  Storing: None	ection:
Section VII - Steps to Be To Waste Dispose Precautions to Other Precaution Section VIII Respiratory For Ventilation: Protective Global	Precautions Faken in Case sal Method: Note to Be Taken in tions: None Control Me Protection (Special Exhaut Mechanical oves: tive Clothing of	for Safe Hand Material Is Re lo special me Handling and easures ecify Type): A	dling and Use eleased or Spilled: No haze thod  Storing: None  void excessive dust  Special Other  Eye Prote	ection: