

DATE: 06/07/05 ACCT: 888235001 PAGE: 1
INDEX: AS1572432 CAT NO: BP1422500 PO NBR: MARY PINKERTON/VC

**** MATERIAL SAFETY DATA SHEET ****

Yeast Extract
08515

**** SECTION 1 - CHEMICAL PRODUCT AND COMPANY IDENTIFICATION ****

MSDS Name: Yeast Extract
Catalog Numbers: S80245, S80245-1, S80245-3, S802451, S802453, BP1422-100, BP1422-2, BP1422-500, BP14222, BP1422500
Synonyms: None
Company Identification: Fisher Scientific
1 Reagent Lane
Fairlawn, NJ 07410
For information, call: 201-796-7100
Emergency Number: 201-796-7100
For CHEMTREC assistance, call: 800-424-9300
For International CHEMTREC assistance, call: 703-527-3887

**** SECTION 2 - COMPOSITION, INFORMATION ON INGREDIENTS ****

| CAS# | Chemical Name | % | EINECS# |
|-----------|----------------|-------|-----------|
| 8013-01-2 | Yeast, extract | 100.0 | 232-387-9 |

Hazard Symbols: None Listed.
Risk Phrases: None Listed.

**** SECTION 3 - HAZARDS IDENTIFICATION ****

EMERGENCY OVERVIEW

Appearance: yellow-white to yellow-orange solid.
Caution! May cause respiratory tract irritation. May cause skin irritation. May cause eye irritation. May cause digestive tract irritation. This is expected to be a low hazard for usual industrial handling.
Target Organs: None.

Potential Health Effects

Eye: Dust may cause mechanical irritation. No information reported.
Skin: May cause skin irritation. No information reported.
Ingestion: May cause irritation of the digestive tract. Low hazard for usual industrial handling.
Inhalation: May cause respiratory tract irritation. Low hazard for usual industrial handling.
Chronic: No information found.

**** SECTION 4 - FIRST AID MEASURES ****

Eyes: Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Get medical aid.
Skin: Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical aid if irritation develops or persists.
Ingestion: If victim is conscious and alert, give 2-4 cupfuls of milk or water. Never give anything by mouth to an unconscious person. Get medical aid.
Inhalation: Remove from exposure and move to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical aid if cough or other symptoms appear.

Notes to Physician:
Treat symptomatically and

**** SECTION 5 - FIRE FIGHTING MEASURES ****

General Information:
As in any fire, wear a self-contained breathing apparatus in pressure-demand, MSHA/NIOSH (approved or equivalent), and full protective gear. Dusts may be an explosion hazard if mixed with air at critical proportions and in the presence of an ignition source.
Extinguishing Media:
For small fires, use water spray, dry chemical, carbon dioxide or chemical foam.
Autoignition Temperature: Not applicable.
Flash Point: Not applicable.
Explosion Limits, lower: Not available.
Explosion Limits, upper: Not available.

4,563

DATE: 06/07/05 ACCT: 888235001 PAGE: 2
INDEX: AS1572432 CAT NO: BP1422500 PO NBR: MARY PINKERTON/VC

NFPA Rating: (estimated) Health: 0; Flammability: 1; Instability: 0

**** SECTION 6 - ACCIDENTAL RELEASE MEASURES ****

General Information: Use proper personal protective equipment as indicated in Section 8.

Spills/Leaks:
Vacuum or sweep up material and place into a suitable disposal container. Clean up spills immediately, observing precautions in the Protective Equipment section. Avoid generating dusty conditions. Provide ventilation.

**** SECTION 7 - HANDLING and STORAGE ****

Handling:
Wash hands before eating. Use with adequate ventilation. Minimize dust generation and accumulation. Avoid contact with eyes, skin, and clothing. Keep container tightly closed. Avoid ingestion and inhalation.

Storage:
Store in a cool, dry, well-ventilated area away from incompatible substances. Keep containers tightly closed.

**** SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION ****

Engineering Controls:
Facilities storing or utilizing this material should be equipped with an eyewash facility and a safety shower. Use process enclosure, local exhaust ventilation, or other engineering controls to control airborne levels.

| Chemical Name | Exposure Limits | | |
|----------------|-----------------|-------------|-------------------|
| | ACGIH | NIOSH | OSHA - Final PELs |
| Yeast, extract | none listed | none listed | none listed |

OSHA Vacated PELs:

Yeast, extract:
No OSHA Vacated PELs are listed for this chemical.

Personal Protective Equipment

Eyes: Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133 or European Standard EN166.
Skin: Wear appropriate protective gloves to prevent skin exposure.
Clothing: Wear appropriate protective clothing to prevent skin exposure.
Respirators: Follow the OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary.

**** SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES ****

Physical State: Solid
Color: yellow-white to yellow-orange
Odor: characteristic odor
pH: Not available.
Vapor Pressure: Not applicable.
Vapor Density: Not applicable.
Evaporation Rate: Not available.
Viscosity: Not applicable.
Boiling Point: Not available.
Freezing/Melting Point: Not available.
Decomposition Temperature: Not available.
Solubility in water: 20% in water.
Specific Gravity/Density: Not available.
Molecular Formula: Variable.
Molecular Weight: 0

**** SECTION 10 - STABILITY AND REACTIVITY ****

Chemical Stability:
Stable under normal temperatures and pressures.
Conditions to Avoid:
Dust generation, strong oxidants.
Incompatibilities with Other Materials:
None reported.
Hazardous Decomposition Products:
Irritating and toxic gases.

4,564

08-30-05

DATE: 06/07/05 ACCT: 888235001 PAGE: 3
INDEX: A51572432 CAT NO: BPL422500 PO NBR: MARY PINKERTON/VC

Hazardous Polymerization: Has not been reported.

**** SECTION 11 - TOXICOLOGICAL INFORMATION ****

RTECS#:
CAS# 8013-01-2: ZF6610000
LD50/LC50:
Not available.
Carcinogenicity:
Yeast, extract -
Not listed by ACGIH, IARC, NIOSH, NTP, or OSHA.
Epidemiology:
No information available.
Teratogenicity:
No information available.
Reproductive Effects:
No information available.
Neurotoxicity:
No information available.
Mutagenicity:
No information available.
Other Studies:
No data available.

**** SECTION 12 - ECOLOGICAL INFORMATION ****

Other
No information available.

**** SECTION 13 - DISPOSAL CONSIDERATIONS ****

Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. US EPA guidelines for the classification determination are listed in 40 CFR Parts 261.3. Additionally, waste generators must consult state and local hazardous waste regulations to ensure complete and accurate classification.
RCRA P-Series: None listed.
RCRA U-Series: None listed.

**** SECTION 14 - TRANSPORT INFORMATION ****

US DOT
No information available
Canadian TDG
No information available.

**** SECTION 15 - REGULATORY INFORMATION ****

US FEDERAL
TSCA
CAS# 8013-01-2 is listed on the TSCA inventory.
Health & Safety Reporting List
None of the chemicals are on the Health & Safety Reporting List.
Chemical Test Rules
None of the chemicals in this product are under a Chemical Test Rule.
Section 12b
None of the chemicals are listed under TSCA Section 12b.
TSCA Significant New Use Rule
None of the chemicals in this material have a SNUR under TSCA.
SARA
CERCLA Hazardous Substances and corresponding RQs
None of the chemicals in this material have an RQ.
SARA Section 302 Extremely Hazardous Substances
None of the chemicals in this product have a TPQ.
Section 313
No chemicals are reportable under Section 313.
Clean Air Act:
This material does not contain any hazardous air pollutants.
This material does not contain any Class 1 Ozone depleters.
This material does not contain any Class 2 Ozone depleters.
Clean Water Act:
None of the chemicals in this product are listed as Hazardous Substances under the CWA.
None of the chemicals in this product are listed as Priority Pollutants under the CWA.
None of the chemicals in this product are listed as Toxic Pollutants under the CWA.
OSHA:
None of the chemicals in this product are considered highly hazardous by OSHA.
STATE
Yeast, extract is not present on state lists from CA, PA, MN, MA, FL, or NJ.
California No Significant Risk Level:
None of the chemicals in this product are listed.
European/International Regulations
European Labeling in Accordance with EC Directives
Hazard Symbols: Not available.

4,565

DATE: 06/07/05 ACCT: 888235001 PAGE: 4
INDEX: A51572432 CAT NO: BPL422500 PO NBR: MARY PINKERTON/VC

Risk Phrases:
Safety Phrases:
S 24/25 Avoid contact with skin and eyes.
WGK (Water Danger/Protection)
CAS# 8013-01-2: 0
United Kingdom Occupational Exposure Limits
United Kingdom Maximum Exposure Limits
Canada
None of the chemicals in this product are listed on the DSL/NDSL list.
This product has a WHMIS classification of Not controlled.
CAS# 8013-01-2 is not listed on Canada's Ingredient Disclosure List.
Exposure Limits

**** SECTION 16 - ADDITIONAL INFORMATION ****

MSDS Creation Date: 7/16/1999 Revision #2 Date: 7/11/2001

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall the company be liable for any claims, losses, or damages of any third party or for lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if the company has been advised of the possibility of such damages.