

b. Operator Pre-start

There are not special requirements for the operator pre-start as long as they have read and reviewed section 7 or have been instructed on the use of the elevator. There are no special requirements if the operator is just using the elevator under normal operations. If the operator is going to use any of the emergency operations then he should be very familiar with section 7 and should be trained in the emergency operations of the elevator systems. Under no circumstance should an operator use the inspection or access functions of the elevator system unless a qualified elevator service technician or inspector is present.

Fire service phase 1 and phase 2 should only be used in case of a fire, and only by trained personnel.

c. Startup, shutdown and post shutdown procedures

The elevator will turn itself on when a hall call has been placed. The elevator will shut itself off after it has responded to its last call and allowed the operator to leave the elevator. There is no need for the operator to do anything for startup or shut down.

If the elevator is to be shut off for any length of time or for servicing, the main disconnect in the elevator equipment room should be shut off and it should be locked out and tagged out. If the elevator has been locked out and tagged out, only the person who locked out the elevator should return the elevator to service.

The 110-vac should not be turned off as this supply keeps power to the emergency lighting system. Prolonged disconnection from the power circuit will cause the emergency lighting system to become inoperative, as it is battery powered. This battery system provides emergency lighting for approximately 24 hours on a full charge. If it is necessary to remove the 110-vac power for more than 24 hours, the elevator should not be returned to service until the emergency battery has had ample time to recharge.



g. Environmental Conditions

The only environmental condition that exists is that of the hydraulic fluid that moves the elevator up and down. The system has three containment areas, the cylinder (section 3), the PVC casing, and the outer steel casing. There is a view tube in the PVC casing that allows for determination if the primary casing has any leakage.

Oil level in the reserve tank should be monitored and recorded on an ongoing basis to determine if there is any leakage. If oil level shows a change then the elevator should be removed from service until determination is made as to the location of any lost oil. If repacking of the cylinder head is required, repair personnel should refer to pages 25-26 of section 10 for the repacking procedure.

MSDS for the hydraulic fluid follows this sheet.

Jul 12 '99 11:07

MATERIAL SAFETY DATA SHEET

Prentium AW Hydraulic Oil 32

Date Prepared: 08/01/1998

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CHEMICAL PRODUCT AND COMPANY IDENTIFICATION 1.

Product Name

Product Number(s)

Premium AW Hydraulic Oil 32

GW111001, GW111002, GW111004, GW111005

Chemical Name

Use

Mixture

Varies

Company Identification

Telephone Numbers

Emergency: Chemtrec (24 hr)

(800) 424-9300

Golden West Lubricants, Inc. 1816 Potrero Avenue

Technical Information:

(626) 443-3441

South El Monte, CA 91733-3023

Product Information:

(626) 443-3441

COMPOSITION/INFORMATION ON INGREDIENTS 2.

HAZARDOUS COMPONENTS:

CAS No.

% by Wt. OSHA PEL TWA (ACGIH)

Distillates, Hydrotreated Heavy Paraffinic 64742-54-7

>10

5mg/m³ as a mist

5mg/m³ as a mist

NOTE:

Components

All the components of this material are listed on the Toxic Substances Control Act Chemical Substances inventory.

NA - Not Applicable

P. 03

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HAZARDS IDENTIFICATION 3.

EMERGENCY OVERVIEW

- Prolonged exposure can cause skin irritation
 - Keep out of sewers and waterways
 - May cause eye irritation

Potential Health Effects

Eye:

May cause stinging irritation, tearing, or redness.

Skin Contact:

Repeated or prolonged contact may cause dryness or irritation.

Ingestion:

May cause mouth and throat irritation when swallowed; ingestion of large quantities may cause

discomfort.

Inhalation:

If used in applications where mist is generated, may cause irritation to nose and throat.

Signs and Symptoms of Exposure:

Irritation to skin, watering or redness in eyes, discomfort, throat irritation

if swallowed.

FIRST AID MEASURES

Eye:

Flush with water. If irritation occurs call for medical assistance.

Skin:

Remove contaminated clothing. Wash with soap and water. Call for medical attention if

symptoms prevail.

Ingestion:

DO NOT induce vomiting. Get medical assistance.

Inhalation:

Remove person to fresh air. Call for medical attention if needed.

FIRE FIGHTING MEASURES 5.

Flash Point:

>300°F

Method:

ASTM D-92

Flammable Limits (% by volume in air): Lower:

ND

Upper: ND

Extinguishing Media:

Dry chemical, carbon dioxide, water fog, foam

NFPA Ratings: Health -

Flammability - 1

Reactivity -

(0 - Insignificant, 1 - Slight, 2 - Moderate, 3 - High, 4 - Extreme)

NA - Not Applicable

Fire Fighting Instructions:

Wear protective clothing and self-contained breathing apparatus. Extinguish

with foam, dry chemical, carbon dioxide.

Combustion or Decomposition Products:

May cause dense smoke, oxides of carbon, nitrogen, sulphur,

phosphorus and zinc.

ACCIDENTAL RELEASE MEASURES 6.

Chemtree Emergency Number (24 hrs):

(800) 424-9300

U.S. Coast Guard National Response Center:

(800) 424-8802

Spill Procedures: Personal Protective Equipment must be worn; see Section 8 for recommendations. Ventilate area if spilled in confined space or other poorly ventilated areas. Prevent entry into sewers and waterways. Pick up free liquid for recycle and/or disposai. Residual liquid can be absorbed on inert material. Check under Transportation and Labeling (DOT/CERCLA) and Other Regulatory Information Section (SARA) for hazardous substances to determine regulatory reporting requirements for spills.

HANDLING AND STORAGE 7,

Handling and Storage:

Avoid eye and prolonged skin contact as with all industrial materials. Wash thoroughly after handling. Follow all MSDS/label precautions after container is emptied because they may retain product residues. Store in a cool, dry place. Keep

containers closed when not in use.

Read and follow all precautions on product label

EXPOSURE CONTROLS/PERSONAL PROTECTION 8.

Personal Protective Equipment

Eye/Face Protection:

Use chemical goggles or face shield.

Skin Protection:

Contact may be minimized by wearing protective clothing and oil resistant gloves.

Respiratory Protection:

Use NIOSH/MSHA approved full face respirator with an organic vapor cartridge if the recommended exposure limit is exceeded. Use self-contained breathing apparatus for entry into confined space, for other poorly ventilated areas and large spill clean-up

sites.

Engineering Controls:

Good general ventilation should be sufficient to control airborne levels below exposure

limits. A local exhaust is recommended in enclosed areas.

Clothing

Recommendation:

Long sleeve shirt is recommended. Wear a chemically protective apron when contact with material may occur. Do not wear rings, watches or similar apparel that could

entrap and cause a skin reaction.

NA - Not Applicable

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

Straw Liquid

Odor:

Mild Hydrocarbon

Specific Gravity (water = 1):

0.86

Viscosity cSt @ 40°C:

30.4-33.6

Flash Point:

>300°F

pH (as is):

ND

pH (dilute) @ 5 %:

ND

Solubility in Water (%):

0

Vapor Pressure (mm Hg):

u ND

Vapor Density (air = 1):

ND

Volatile Organic Compound:

ND

10. STABILITY AND REACTIVITY

Hazardous Decomposition Products:

May cause dense smoke, oxides of carbon, nitrogen, sulphur,

phosphorus and zinc.

Chemical Stability:

Material is normally stable at room temperature and pressure. See the

Handling and Storage section for further details.

Conditions to Avoid:

Excessive heat or flames

Incompatibility with other Materials:

Oxidizing or acidic materials

Hazardous Polymerization:

Will not occur

11. TOXICOLOGICAL INFORMATION

No information available at present time.

NA -- Not Applicable

12. ECOLOGICAL INFORMATION

No data are available on the adverse effects of this material on the environment. As a precaution, product should be kept out of sewage and drainage systems and bodies of water.

13. DISPOSAL CONSIDERATIONS

Any disposal practice must be in compliance with local, state and federal laws and regulations. Empty containers must be handled with care due to product residue. GoldenWest Lubricants Inc. will provide lists of companies which recycle or handle waste material to customers upon request. For information call (626) 443-3441.

14. TRANSPORT INFORMATION

DOT Shipping Name:

Not regulated

DOT Hazard Class:

Not regulated

DOT Packaging Group:

NA

DOT/UN Identification:

NA

Additional Information:

15. REGULATORY INFORMATION

TSCA Status:

All components are listed in TSCA inventory.

CERCLA Reportable Quantity:

This product does not contain any RQ substances.

SARA Title III: Title III of the Superfund Amendments and Reauthorization Act of 1986:

Section 302 Extremely Hazardous

Not an extremely hazardous substanct:

Substances:

Section 311/312 Hazardous Categories:

Immediate (Acute) Health Effects:

Nο

Delayed (Chronic) Health effects:

No

Fire Hazard:

No

Sudden Release of Pressure Hazard:

, No

Reactivity Hazard:

No

Carcinogenicity Status:

Constituents not listed by: IARC, NTP,

OSHA

NA - Not Applicable

SARA 313 Toxic Chemical Release Reporting:

Chemical Name

CAS Number

% in Product

This product does not contain greater than 1.0% (greater than 0.1% for carcinogenic substance) listed under SARA Section 313.

California Proposition 65 Status:

Not Applicable

OTHER INFORMATION 16.

Label Hazard Ratings:

NFPA

Fire - 1

Health - 1

Reactivity - 0

Specific Hazard - none

HMIS

Health - 1

Fire - 1

Reactivity - 0

Personal Protection Index - C

MSDS Revision Statement:

All sections revised.

This information is, to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty or guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use.

NA - Not Applicable



o. Corrective maintenance man-hours

Item	Man-hours
Repack piston	6
Replace pushbuttons	1
Replace lamps	.5
Monthly preventative maintenance	1
Quarterly Routine	2-3
Annual routine	2-3
Annual Relief valve test	2
Door operator adjustment	1
Door belt replacement	1
Starter contact replacement	1
Motor belt replacement	1
Valve adjustment	1

Note: any of these procedures should only be attempted by a qualified elevator service technician. Attempts to perform these operations by an untrained person could result in serious injury or death.



Personnel training requirements

Read and review the "Normal Operation" procedure on pages 13-16 of section 7.

This area covers the normal operation, emergency operations, as well as the inspection and access operations of the elevator system.



Testing equipment and special tool information

Testing equipment

Load test:
2100 pounds test weights
Pressure gauge with quick release fitting
Tachometer
Timing device (15 minute sit test)

Special Tool information:

There are no special tools required for any equipment on this elevator system. All controls are field programmable from the C.P.U. without the use of any additional tool.



Contractor Information

General Contractor



Subcontractor

Modern Elevator P.O. Box 656 Baldwin Park, CA 91706 Contact Dennis Mason