

Revision Date:

10/31/2000

Date of Printing:

12/14/2000

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: SANTOVAR TAHQ

MSDS NO.

FLXP0043

Chemical Name:

2,5-Di(tert-amyl)hydroguinone

Synonyms:

Santovar A; 2,5-Di-t-pentylhydroquinone; 1,4-Benzenediol, 2,5-bis(1,1-dimethylpropyl)-

Use:

Antioxidant.

Manufactured By: **Emergency Telephone:**

Flexsvs America L.P. 260 Springside Drive Akron OH 44333 USA CHEMTREC: 1-800-424-9300 (TOLL FREE - USA and Territories)

703-527-3887 (ELSEWHERE - Collect Calls Accepted)

CANUTEC:

613-996-6666 (Canada)

SETIQ:

91-800-00-214 (Mexico)

Prepared By:

Flexsys America Product Safety Phone (330) 668-8281 FAX (330) 668-8281

COMPOSITION/INFORMATION ON INGREDIENTS

Components/CAS#

Percent

2,5-Di(tert-amyl)hydroguinone

79-74-3

100

3. HAZARDS IDENTIFICATION

Hazard Information

Emergency Overview: WARNING! Combustible dust - explosion potential. Causes eve irritation. This material is a skin

irritant. May cause allergic skin reaction.

Eye Contact:

Causes eye irritation. Moderate Eye Irritation: signs/symptoms can include redness, swelling, pain,

tearing, and hazy vision.

Skin Contact:

Causes moderate skin irritation. Causes drying of the skin. May cause a rash and itching of the

skin. May cause an allergic skin reaction.

Inhalation:

Causes moderate respiratory irritation. Irritation (upper respiratory): signs/symptoms can include

soreness of the nose and throat, coughing and sneezing.

Ingestion:

Illness may occur after a single swallowing of relatively large quantities of this material.

FIRST AID MEASURES

In Eyes:

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes and get





HARWICK STANDARD DISTRIBUTION CORPORATION

medical attention if irritation persists.

On Skin: Remove containinated clothing, wash skin with water, using soap if available. Remove

contaminated clothing and launder before reuse. If irritation persists or signs of toxicity occur, seek

medical attention.

Inhaled: Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get

immediate medical attention.

Swallowed: If swallowed, give at least 3-4 glasses of water, but do not induce vomiting. Do not give anything by

mouth to an unconscious or convulsing person. Get medical attention.

Notes To Physician: Treat symptomatically.

5. FIRE FIGHTING MEASURES

Flash Point (°F/C):

>200°C

Flash Point Method:

Cleveland Closed Cup

Autoignition Temp. (°F/C):

880°F

Lower Explosion Limit in Air (LEL): Upper Explosion Limit in Air (UEL): 0.05 oz/ft3 Not Determined.

Extinguishing Media:

Water fog, carbon dioxide, foam, dry chemical

Special Exposure Hazards:

Fight fire from a safe distance and from a protected location. Sprinkler and/or deluge systems recommended for bulk storage areas. Use water spray to cool fire exposed surfaces. Decomposition in fire may produce toxic gases. Do not allow

runoff to enter waterways.

Special Protective Equipment:

Fire fighters should wear full protective clothing, including self-contained breathing

equipment:

Unusual Fire/Explosion Hazards:

Toxic emissions may result if product is involved in a fire.

6. ACCIDENTAL RELEASE MEASURES

Spill Procedures:

Wear protective equipment specified. Avoid the generation of dust. Sweep,

vacuum, or shovel and place into closable container for disposal.

Procedure for Cleaning/Absorption:

Isolate area and remove sources of friction, impact, heat, low level electrical current, and RF energy. Isolate spill and stop leak where safe. Remove ignition sources and work with non-sparking tools. Scoop up and remove. Ventilate area.

Do NOT spread spilled product with water.

CERCLA Reportable Quantity (RQ):

Not Applicable

7. HANDLING AND STORAGE

Handling:

Good hygienic practices should be observed. Work clothes should be washed seperately at the end of each work day. Disposable clothing should be discarded with material. Avoid generating or breathing dust. Avoid contact with eyes, skin and clothing. Reclose containers of unused product. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Do not reuse this container.

Storage:

Store closed containers in a cool, dry, well-ventilated area. Store away from strong oxidizing materials.

Store away from strong acids. Avoid exposure to direct sunlight. Do not double stack.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Eye Protection: Wear safety glasses or goggles to protect against exposure. Wear eye protection

appropriate to handling activities.

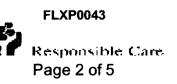
Skin Protection:

Normal work coveralls. Launder contaminated clothing before reuse.

Gloves:

Use gloves as a standard industrial handling procedure. All cleanable impervious glove

types are acceptable.



Respiratory Protection: Appropriate respiratory protection shall be worn when applied engineering controls are not

adequate to protect against inhalation exposure. Firefighting; use a Positive Pressure

Demand Full Face Self Contained Breathing Apparatus.

Ventilation: General; local exhaust ventilation as necessary to control any air contaminants to within

their exposure limits during the use of this product. If air is to be recirculated, it must be

filtered properly.

Airborne Exposure Limits:

Nuisance Dust. OSHA PEL/8Hr-TWA = 15 mg/m3 (Total Dust). OSHA PEL/8-Hr TWA = 05

mg/m3 (Respirable Dust). ACGIH TLV/8-Hr TWA = 10 mg/m3.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:

White to off-white powder

Odor:

SLIGHT

:Ha

N/A

Specific Gravity: Density:

1.05 @ 25°C

Bulk Density:

Not Determined Not Determined

Melting Point (°F/C): Boiling Point (°F/C): 179.4-180.4°C Not Determined

Vapor Pressure:

Negligible

% Volatile by Volume: <0.5%

Vapor Density (Air=1): Not Determined

Solubility in Water:

INSOLUBLE

Other Solubility:

Soluble in Acetone Ether Alcohol Benzene Naphtha

Viscosity:

Not Determined.

Other Data: Molecular Weight: Not determined.

Molecular Formula:

C16-H26-O2

250.4

10. STABILITY AND REACTIVITY

Chemical Stability:

Stable when stored at room temperature in closed, original container. Stable under

normal conditions of handling, use and transportation.

Hazardous Polymerization:

Conditions to Avoid:

Will not occur

Keep away from heat, sparks and flame. Exposure to heat and humidity. Contact

with acids. Strong oxidizing agents. Do not double stack.

Materials to Avoid:

Contact with oxidizing agents. Contact with acids.

Hazardous Decomposition Products:

Carbon monoxide. Oxides of nitrogen.

Additional Guidelines:

Not Applicable

11. **TOXICOLOGICAL INFORMATION**

Target Organs

Acute Oral LD50 (mg/kg):

1900 mg/kg

Acute Dermal LD50 (mg/kg): Acute Inhalation LC50 (mg/l): >3160 mg/kg Not Determined

Principle Routes of Exposure:

Eyes. Inhalation. Dermal - skin.

Ingestion:

Illness may occur after a single swallowing of relatively large quantities of this

material.

Skin Contact:

Causes moderate skin irritation. Causes drying of the skin. May cause a rash and

itching of the skin. May cause an allergic skin reaction.

Inhalation:

Causes moderate respiratory irritation. Irritation (upper respiratory):

signs/symptoms can include soreness of the nose and throat, coughing and

FLXP0043

Responsible Care

Page 3 of 5

sneezing.

Causes eye irritation. Moderate Eye Irritation: signs/symptoms can include **Eye Contact:**

redness, swelling, pain, tearing, and hazy vision.

Aggravated Conditions: Dermal ailments. Respiratory Eye ailments.

Carcinogenicity Comment: This product or one of its ingredients present 0.1% or more is NOT listed as a

carcinogen or suspected carcinogen by NTP, IARC, or OSHA. Carcinogenic:

Category 3

Other: **Primary Irritation Effect:** Only hazard is a dust hazard. Slightly irritating. Sensitizer.

Carcinogenicity:

Negative in standard tests using bacteria and yeast cells.

Genotoxicity:

None

Reproductive/Developmental

Not determined

Toxicity:

12. **ECOLOGICAL INFORMATION**

Acute Fish Toxicity: 96Hr LC50 Rainbow Trout = 0.07 mg/l. 96Hr LC50 Fathead Minnow = 0.12 mg/l.

> 96Hr LC50 Bluegill Sunfish = 34.0 mg/l. 48Hr EC50 Daphnia Magna: 0.91 mg/l.

Acute Crustaceans Toxicity: Acute Algae Toxicity:

96Hr EC50 Algae = 2.90 mg/l.

Octanol/Water Coefficient:

Not determined.

Chemical Fate Information:

Biodegradation: 1% based on CO2 evolution.

Other Information:

Not Available

13. **DISPOSAL CONSIDERATIONS**

Disposal of Waste Method:

This material is not a RCRA hazardous waste. Bury in a licensed landfill or burn in an approved incinerator according to federal, state, and local regulations. Empty containers should be handled in a manner not to cause dusting during collection. transporation and disposal.

Contaminated Packaging:

If empty container retains product residues, all label precautions must be observed. Store away from ignition sources. Transport with all closures in place. Return for reuse or dispose according to national or local regulations. Dispose of container according to national or local regulations.

14. TRANSPORT INFORMATION

DOT:DOT Status: Not Regulated

DOT Shipping Name: DOT Reportable Quantity (lbs):

NONE

None NOT REGULATED FOR TRANSPORTATION

ICAO/IATA:Status:

None

Proper Shipping Name:

UN/NA Number:

NONE

IMDG:Status:

Not Regulated

Proper Shipping Name:

None

TDG (Canada):Status:

Not Regulated

Proper Shipping Name:

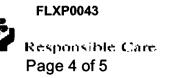
None

REGULATORY INFORMATION

Worldwide Inventory Status

TSCA (USA):

Listed



Canadian DSL:

Canadian NDSL:

EINECS/ELINCS (Europe):

Japanese Inventory (ENCS):

Korean Chemical Inventory (ECL):

Listed
Listed
Listed
Listed

(AICS):

New Zealand (NZ):

Phillipines (PICCS) Inventory:

China (CLECS):

Listed

Listed

US Regulatory Rules

SARA Section 302: None Found SARA 311/312 Hazard Catagories: Immediate Fire

SARA 313 Chemical: N/A

RCRA Status: Not a RCRA waste.

Other Regulations:

California Proposition 65:
NONE
New Jersey Right-to-Know List:
Pennsylvania Right to Know List:
N/A
Florida Right to Know:
N/A
Minnesota Right to Know:
N/A
MA Right to Know Law:
N/A

FDA Status 21 CFR: Regulated for Use under the following sections of 21 CFR: 177.2600 Rubber

Articles Intended for Repeated Use in Food Contact. 175.105 Components of

Adhesives.

Canadian Regulations

WHMIS Hazard Class: D2B TOXIC MATERIALS / Materials Causing Other Toxic Effects

NPRI: N/A

16. OTHER INFORMATION

Hazard Rating Systems:

HMIS Classification: HEALTH 2, FLAMMABILITY 1, REACTIVITY 0
NFPA Rating: HEALTH 1, FLAMMABILITY 1, REACTIVITY 0

The following has been revised since the last issue of this MSDS:

Nothing has been revised.

Additional Information: NONE

Important Note: This information is furnished without warranty, expressed or implied, as to accuracy or

completeness. The information is obtained from various sources including the manufacturer and other third party sources. The information may not be valid under all conditions nor if

this material is used in combination with other materials or in any process. Final determination of suitability of any material is the sole responsibility of the user.

END OF MSDS

