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**PHARMCO-AAPER**

AND COMMERCIAL ALCOHOLS

Product Information (203) 740-3471 / Emergency Assistance CHEMTREC 1-800-424-9300

## MATERIAL SAFETY DATA SHEETS

Manufacturer: PHARMCO-AAPER  
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Dodecane 99%

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### 1. CHEMICAL PRODUCT IDENTIFICATION

Product Name: Dodecane  
Synonym(s): Dihexyl; Bihexyl; duodecane  
Molecular Formula:  $\text{CH}_3(\text{CH}_2)_{10}\text{CH}_2$   
Molecular Weight: 170.34

### 2. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS No	Percent	Hazardous
Dodecane	112-40-3	90 - 100%	Yes

### 3. HAZARDS IDENTIFICATION

WARNING! HARMFUL OR FATAL IF SWALLOWED. MAY BE HARMFUL IF INHALED. MAY CAUSE IRRITATION TO SKIN, EYES, AND RESPIRATORY TRACT. AFFECTS CENTRAL NERVOUS SYSTEM. PROLONGED EXPOSURE CAN CAUSE NARCOTIC EFFECTS. COMBUSTIBLE LIQUID AND VAPOR.

NFPA Hazard Ratings: Health - 0, Flammability - 2, Reactivity - 0

NOTE: NFPA ratings involve data and interpretations that may vary from company to company. They are intended only for rapid, general identification of the magnitude of the specific hazard. To deal adequately with the safe handling of this material, all the information contained in this MSDS must be considered.

#### Potential Health Effects

Inhalation: A slight irritant to the mucous membranes. Can have a narcotic effect in high concentrations. Direct aspiration into the lungs may cause chemical pneumonitis, pulmonary edema, and hemorrhaging.

Ingestion: A potential aspiration hazard if swallowed. May cause damage to the lungs. Symptoms may parallel inhalation exposure.

Skin Contact: Moderately irritating to the skin.

Eye Contact: Moderately irritating to the eyes.

Chronic Exposure: Continued or repeated skin contact may cause dermatitis.

Aggravation of Pre-existing Conditions: No information found.

#### **4. FIRST AID MEASURES**

Inhalation: Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

Ingestion: Aspiration hazard. If swallowed, DO NOT INDUCE VOMITING. Give large quantities of water. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Skin Contact: Remove any contaminated clothing. Wash skin with soap or mild detergent and water for at least 15 minutes. Wash clothes before reuse. Get medical attention if irritation develops or persists.

Eye Contact: Immediately flush eyes with plenty of water for at least 15 minutes, lifting lower and upper eyelids occasionally. Get medical attention immediately.

#### **5. FIRE FIGHTING MEASURES**

Fire:

Flash point: 74C (165F) CC

Autoignition temperature: 203C (397F)

Flammable limits in air % by volume: lcl: 0.6

Explosion: Above flash point, vapor-air mixtures are explosive within flammable limits noted above.

Fire Extinguishing Media: Dry chemical, foam or carbon dioxide. Water spray may be used to keep fire exposed containers cool.

Special Information: In the event of a fire, wear full protective clothing and NIOSH-approved self-contained breathing apparatus with full facepiece operated in the pressure demand or other positive pressure mode. Water may be used to flush spills away from exposures and to dilute spills to non-flammable mixtures.

#### **6. ACCIDENTAL RELEASE MEASURES**

Ventilate area of leak or spill. Remove all sources of ignition. Wear appropriate personal protective equipment as specified in Section 8. Isolate hazard area. Keep unnecessary and unprotected personnel from entering. Contain and recover liquid when possible. Use non-sparking tools and equipment. Collect liquid in an appropriate container or absorb with an inert material (e. g., vermiculite, dry sand, earth), and place in a chemical waste container. Do not use combustible materials, such as saw dust. Do not flush to sewer!

## 7. HANDLING AND STORAGE

Keep in a tightly closed container, stored in a cool, dry, ventilated area. Protect against physical damage. Isolate from any source of heat or ignition. Containers of this material may be hazardous when empty since they retain product residues (vapors, liquid); observe all warnings and precautions listed for the product.

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Airborne Exposure Limits: None established.

Ventilation System: A system of local and/or general exhaust is recommended to keep employee exposures as low as possible. Local exhaust ventilation is generally preferred because it can control the emissions of the contaminant at its source, preventing dispersion of it into the general work area. Please refer to the ACGIH document, *Industrial Ventilation, A Manual of Recommended Practices*, most recent edition, for details.

Personal Respirators (NIOSH Approved): For conditions of use where exposure to the substance is apparent, consult an industrial hygienist. For emergencies, or instances where the exposure levels are not known, use a full-facepiece positive-pressure, air-supplied respirator. WARNING: Air purifying respirators do not protect workers in oxygen-deficient atmospheres.

Skin Protection: Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact.

Eye Protection: Use chemical safety goggles. Maintain eye wash fountain and quick-drench facilities in work area.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Colorless to straw-colored liquid.

Odor: Mild aliphatic hydrocarbon odor.

Solubility: Insoluble in water.

Specific Gravity: 0.75 20C/4C

pH: No information found.

% Volatiles by volume @ 21C (70F): 100

Boiling Point: 216C (421F)

Melting Point: -9.6C (14F)

Vapor Density (Air=1): 5.9

Vapor Pressure (mm Hg): 0.3 @ 20C (68F)

Evaporation Rate (BuAc=1): No information found.

## 10. STABILITY AND REACTIVITY

Stability: Stable under ordinary conditions of use and storage.

Hazardous Decomposition Products: Toxic gases and vapors may be released if involved in a fire.

Hazardous Polymerization: Will not occur.

Incompatibilities: Strong oxidizers.

Conditions to Avoid: Heat, flames, ignition sources and incompatibles.

## 11. TOXICOLOGICAL INFORMATION

-----\Cancer Lists\-----			
---NTP Carcinogen---			
Ingredient	Known	Anticipated	IARC Category
Dodecane (112-40-3)	No	No	None

## 12. ECOLOGICAL INFORMATION

Environmental Fate: When released into the soil, this material may biodegrade to a moderate extent. When released into the soil, this material is not expected to leach into groundwater. When released into water, this material may biodegrade to a moderate extent. When released into water, this material may evaporate to a moderate extent. This material has an estimated bioconcentration factor (BCF) of less than 100. When released into the air, this material is expected to be readily degraded by reaction with photochemically produced hydroxyl radicals. When released into the air, this material may be moderately degraded by photolysis. When released into the air, this material may be removed from the atmosphere to a moderate extent by dry deposition.

Environmental Toxicity: No information found.

## 13. DISPOSAL CONSIDERATIONS

Whatever cannot be saved for recovery or recycling should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options. State and local disposal regulations may differ from federal disposal regulations. Dispose of container and unused contents in accordance with federal, state and local requirements.

## 14. TRANSPORT INFORMATION

Not regulated.

## 15. REGULATORY INFORMATION

-----\Chemical Inventory Status - Part 1\-----				
Ingredient	TSCA	EC	Japan	Australia
Dodecane (112-40-3)	Yes	Yes	Yes	Yes

-----\Chemical Inventory Status - Part 2\-----				
--Canada--				
Ingredient	Korea	DSL	NDSL	Phil.
Dodecane (112-40-3)	Yes	Yes	No	Yes

-----\Federal, State & International Regulations - Part 1\-----				
-SARA 302-		-----SARA 313-----		
Ingredient	RQ	TPQ	List	Chemical Catg.
Dodecane (112-40-3)	No	No	No	No

-----\Federal, State & International Regulations - Part 2\-----			
-RCRA-		-TSCA-	

Ingredient	CERCLA	261.33	8(d)
Dodecane (112-40-3)	No	No	No

Chemical Weapons Convention: No TSCA 12(b): No CDTA: No  
SARA 311/312: Acute: Yes Chronic: Yes Fire: Yes Pressure: No  
Reactivity: No (Pure/Liquid)

Australian Hazchem Code: No information found.

Poison Schedule: No information found.

Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center of release of quantities of Hazardous Substances equal or greater than the reportable quantities (RQs) in 40 CFR 302.4. Components present in this product at a level which could require reporting under the statute are: **NONE**

## 16. OTHER INFORMATION

The information contained herein is based on current knowledge and experience; no responsibility is accepted that the information is sufficient or correct in all cases. Users should consider these data only as a supplement to other information gathered by them and must make independent determinations of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers and the protection of the environment.