



TULSTAR PRODUCTS, INC.

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MATERIAL SAFETY DATA SHEET

Company Information

Company Name: **TULSTAR PRODUCTS, INC.**
5510 S. Lewis Ave.
Tulsa, OK 74105
Phone Number: (918) 749-9060
Fax Number: (918) 747-1444
Email Address: tulstar@tulstar.com
Emergency Number: CHEMTREC 800-424-9300 (24 hours)

Ingredients

Cas: 109-66-0
Name: Pentane; (N-Pentane)
OSHA PEL: 600 ppm; 750 ppm STEL
ACGIH TLV: 600 ppm; 750 ppm STEL

Cas: 78-78-4
Name: Butane, 2-Methyl-; (Isopentane)
OSHA PEL: N/K (FP N)
ACGIH TLV: N/K (FP N)

Name: Hydrocarbons; (related hydrocarbons)
OSHA PEL: N/K (FP N)
ACGIH TLV: N/K (FP N)

Health Hazards Data

LD50/LC50 Mixture: None specified by manufacturer.

Route Of Entry:

Inhalation- Yes

Skin- Yes

Ingestion- No

Carcinogenicity Inds:

NTP- NO

IARC- NO

OSHA- NO

Effects of Exposure:

Eye: Freezing burn if compressed liquid contacts eye. Vapors may be mildly irritating.

Skin: Freezing burn if compressed liquid contacts skin.

Inhalation: Vapors may be mildly irritating to lungs.

Chronic: No known applicable information.

Explanation Of Carcinogenicity: Not relevant

Signs And Symptoms Of Overexposure: See health hazards.

Medical Cond Aggravated By Exposure: None specified by manufacturer.

First Aid:

Eye:	Immediately flush w/running water for at least 15 minutes, if irritation develops, seek medical attention.
Skin:	Flush w/water for 15 minutes. If irritation develops, seek medical attention.
Inhalation:	Move from exposure. If breathing ceases, administer artificial respiration followed by oxygen. Seek medical attention.
Ingestion:	Seek immediate medical attention.

Handling and Disposal

Spill Release Procedures:	Evacuate area of all unnecessary persons. Wear protective equipment &/or garments as described in personal prot info section shut off source, if possible & contain spill. Protect from ignition. Keep out of water sources & sewers. Absorb in dry, inert material (sand, clay,(supdat.)
Neutralizing Agent:	None specified by manufactuerer.
Waste Disposal Methods:	Disposal must be I/A/W Federal, State & Local Regulations (FP N). Insure conformity w/all applicable disposal regulations. Incinerate.
Handling And Storage Precautions:	Avoid inhalation & Skin & Eye cont. store in cool, well-ventilated area away from ignition sources provided means for controlling leaks, keep centers lsd.
Other Precautions:	Bond & ground during transfer. NOTE: Personal Protection Information Is based upon general information as to normal uses conditions. Special/unusual uses/conditions exist, it is suggested that the expert assistance of industrial hygenist/other qualified (supply data.)

Fire and Explosion Hazard Information

Flash Point Method:	TCC
Flash Point Text:	<-40F,<-40C
Lower Limits:	1.5%
Upper Limits:	7.8%
Extinguishing Media:	Dry chemical, foam or carbon dioxide (CO2).
Fire Fighting Procedures:	Use Niosh/msha approved BA & full protection equipment Evacuate area of all unnecessary persons. Shut off source if poss. Water fog/spray may be used to cool exposure (SUPDAT)
Unusual Fire/Explosion Hazard:	Carbon oxides formed when burned highly. Flammable vapors which are HVR/AIR may accumulate in low areas &/or spread along ground away from handling site.

Control Measures

Respiratory Protection:	Not generally required for concentrations exceeding The recommended exposure level, use Niosh/Msha approved air purifying respirator.
Ventilation:	Use adequate ventilation to control exposure below recommended levels.
Protective Gloves:	Impervious rubber gloves.
Eye Protection:	Anis approved chemical goggles (FP N).
Other Protective Equipment:	Emergency eye wash & deluxe shower (FP N). Wear protective equipment &/or garments if exposure conditions warrant.
Work Hygienic Practices:	Wash hands after handling. Launder contaminated clothing before reuse.
Supplemental Safety and Health:	VP:15 PSIA @ 100ft. fire fight Proc. Centers & equipment. Do not spray water directly on fire – prod. will float & could be reignited on surface of water. Spill proc. sawdust, ect.). Transfer to display drums using non-sparking equipment. Other prec: professional be sought. Prot. Measures during repair & maintence of contaminated equipment: wear

Physical/Chemical Properties

HCC:	F2
B.P. Text:	97.0F,36.1C

Vapor Pres:	Supp. data
Vapor Density:	2.48
Spec Gravity:	0.63 (H2O=1)
Evaporation Rate & Reference:	28.8 (BUTYL ACETATE=1)
Solubility in Water:	Negligible
Appearance and Odor:	Colorless liquid; mild, gasoline odor.
Percent Volatiles by Volume:	100

Reactivity Data

Stability Indicator:	Yes
Stability Condition To Avoid:	None specified by manufacturer.
Materials To Avoid:	Oxygen & strong oxidizing agents.
Hazardous Decomposition Products:	Carbon oxides formed when burned.
Hazardous Polymerization Indicator:	No
Conditions To Avoid Polymerization:	Not relevant

Toxicological Information

Ecological Information

MSDS Transport Information

Regulatory Information

Other Information

Product Id:	N-Pentane and Pentane(s)
Cage:	GO225
Assigned Ind:	Yes
Company Name:	Phillips 66 Co.
Street:	699 Adams blvd.
City:	Bartlesville, OK
Zip code:	74004
Health Emergency Phone:	918-661-3865; 918-661-8118
Label Required Ind:	Yes
Date Of Label Review:	12/07/1993
Status Code:	C
Label Date:	12/07/1993
Origination Code:	G
Eye Protection IND:	Yes
Skin Protection IND:	Yes
Signal Word:	Danger
Respiratory Protection IND:	Yes
Health Hazard:	Moderate
Contact Hazard:	Moderate
Fire Hazard:	Severe
Reactivity Hazard:	None
Hazard And Precautions:	Extremely flammable.
Acute eye:	Freezing burn if compressed liquid contacts eye. Vapors may be mildly irritating.
Skin:	Freezing burn if compressed liquid contacts skin.
Inhalation:	Vapors may be mildly irritating to lungs.
CHRONIC:	None listed by manufacturer.

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