

Linde Gas (216) 642-6600
P.O. Box 94737
Cleveland, OH 44101-4737
www.us.lindegas.com

**MATERIAL
SAFETY
DATA SHEET**
No. 118

SECTION 1. PRODUCT INFORMATION

NAME: 2,2-Dimethylpropane

TRADE NAME AND SYNONYMS: Neo-Pentane; 2,2-Dimethylpropane

APPEARANCE AND ODOR: Colorless liquid and vapor with little or no odor

CHEMICAL NAME AND SYNONYMS: Neo-Pentane; 2,2-Dimethylpropane

CAS #: 463-82-1

DOT I.D. No: UN 2044

DOT HAZARD CLASS: Division 2.1

CHEMICAL FORMULA: $\text{CH}_3\text{C}(\text{CH}_3)_2\text{CH}_3$

CHEMICAL FAMILY: Aliphatic hydrocarbon

ISSUE DATE AND REVISIONS: Revised November 2005

SECTION 2. HEALTH HAZARD DATA

EMERGENCY OVERVIEW: 2,2-Dimethylpropane is a flammable gas approximately 2.6 times heavier than air.

Inhalation: It has a very mild anesthetic effect which might cause lack of coordination or mental alertness; however, the major property is the exclusion of an adequate supply of Oxygen to the lungs.

Contact with the rapidly evaporating liquid could cause frostbite or cryogenic "burns".

TIME WEIGHTED AVERAGE EXPOSURE LIMIT: None listed for 2,2-Dimethylpropane or Neo-Pentane. Should be considered a simple asphyxiant (ACGIH 2004). OSHA 2004 has no listing for 2,2-Dimethylpropane or Neo-Pentane .

Oxygen levels should be maintained at greater than 19.5 Molar percent at normal atmospheric pressure (pO₂ >148 torr).

TOXICOLOGICAL PROPERTIES: Breathing high concentrations causes a very mild anesthetic effect.

Frostbite effects are the change in the color of the skin to gray or white possibly followed by blistering.

2,2-Dimethylpropane is not listed in the IARC, NTP or by OSHA as a carcinogen or potential carcinogen.

Persons in ill health where such illness would be aggravated by exposure to 2,2-Dimethylpropane should not be allowed to work with or handle this product.

RECOMMENDED FIRST AID TREATMENT: PROMPT MEDICAL ATTENTION IS MANDATORY IN ALL CASES OF OVEREXPOSURE TO 2,2-DIMETHYLPROPANE. RESCUE PERSONNEL SHOULD BE EQUIPPED WITH SELF-CONTAINED BREATHING APPARATUS AND BE COGNIZANT OF EXTREME FIRE AND EXPLOSION HAZARD.