



Common Name: **2,3-DIMETHYLBUTANE**

Synonyms: Diisopropyl

CAS No: 79-29-8

Molecular Formula: C₆H₁₄

RTK Substance No: 0744

Description: Clear, colorless liquid

HAZARD DATA

| Hazard Rating | Firefighting | Reactivity |
|--|--|--|
| 1 - Health 3 - Fire 0 - Reactivity DOT#: UN 2457 ERG Guide #: 128 Hazard Class: 3 (Flammable) | Use dry chemical, CO ₂ , alcohol-resistant foam or other foaming agent as extinguishing agents. Water may not be effective in fighting fires. POISONOUS GASES ARE PRODUCED IN FIRE. CONTAINERS MAY EXPLODE IN FIRE. Use water spray to keep fire-exposed containers cool. Vapors may travel to a source of ignition and flash back. Vapor is heavier than air and may travel a distance to cause a fire or explosion far from the source. | 2,3-Dimethylbutane is not compatible with OXIDIZING AGENTS (such as PERCHLORATES, PEROXIDES, PERMANGANATES, CHLORATES, NITRATES, CHLORINE, BROMINE and FLUORINE). |

SPILL/LEAKS

Isolation Distance:

Small Spills: 50 meters (150 feet)

Large Spills: 300 meters (1,000 feet)

Fire: 800 meters (1/2 mile)

Cover with an activated carbon adsorbent and place in covered containers for disposal.

May be harmful to animal and plant life.

PHYSICAL PROPERTIES

| | |
|--------------------------|-----------------------------|
| Odor Threshold: | 65 to 248 ppm |
| Flash Point: | -20°F (-29°C) |
| LEL: | 1.2% |
| UEL: | 7.0% |
| Vapor Density: | 3 (air = 1) |
| Vapor Pressure: | 200 mm Hg at 68°F (20°C) |
| Specific Gravity: | 0.65 - 0.66 (water = 1) |
| Water Solubility: | Insoluble |
| Boiling Point: | 122° to 145°F (50° to 63°C) |
| Molecular Weight: | 86.2 |

EXPOSURE LIMITS

OSHA: None

NIOSH: 100 ppm, 10-hr TWA; 510 ppm, 15-min Ceiling

ACGIH: 500 ppm, 8-hr TWA; 1,000 ppm, 15-min STEL

IDLH: 1,100 ppm (as *Hexane*)

PROTECTIVE EQUIPMENT

| | |
|--------------------|---|
| Gloves: | Viton, Nitrile or Silver Shield®/4H® (>8-hr breakthrough) |
| Coveralls: | DuPont Tychem® CPF 3, CPF 4, BR and LV, Responder®, TK; Kappler Zytron® 300; and Saint-Gobain ONESuit®/TEC or equivalent (>8-hr breakthrough) |
| Respirator: | >100 ppm - Supplied air |

HEALTH EFFECTS

Eyes: Irritation

Skin: Irritation

Inhalation: Nose, throat and lungs
Headache, nausea, dizziness and lightheadedness

FIRST AID AND DECONTAMINATION

Remove the person from exposure.

Flush eyes with large amounts of water for at least 15 minutes. Remove contact lenses if worn.

Quickly remove contaminated clothing and wash contaminated skin with large amounts of soap and water.

Begin artificial respiration if breathing has stopped and CPR if necessary.

Transfer to a medical facility.