Section 1 – Product and Company Identification

1.1 GHS Product Identifier : 3-Methylpentane

Other means of identification : Diethylmethylmethane
Pentane, 3-methyl

Product Number : 315208

Chemical Formula : C_6H_{14}

CAS Number : 96-14-0

EC Number : 202-481-4

1.2 Recommended use : Laboratory chemicals, Manufacture of substances, organic synthesis; solvent, fuel

1.3 Supplier's detail : Wiley Companies
1245 South 6th Street
Coshocton, Ohio 43812.
(740) 622-0755.

1.4 Emergency Telephone number : (800) 633-8253.
International number : (801) 629-0667.

Section 2 – Hazards Identification

2.1 GHS Classification of the substance or mixture
GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)
Flammable liquids (Category 2)
Skin irritation (Category 2)
Eye irritation (Category 2A)
Specific target organ toxicity – single exposure (Category 3)
Aspiration hazard (Category 1)
Acute aquatic toxicity (Category 2)
Chronic aquatic toxicity (Category 2)

2.2 GHS Label elements, including precautionary statements
Pictogram

Signal word Danger

Hazard statement(s)

H225	Highly flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H336	May cause drowsiness or dizziness.
H411	Toxic to aquatic life with long lasting effects.

Precautionary statement(s)

P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233	Keep container tightly closed.
P240	Ground/bond container and receiving equipment.
P241	Use explosion-proof electrical/ventilating/lighting/equipment.
P242	Use only non-sparking tools.
P243	Take precautionary measures against static discharge.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash skin thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area
P273	Avoid release to the environment.
P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P331	Do NOT induce vomiting.
P362	Take off contaminated clothing.
P391	Collect spillage.
P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing
P332 + P313	If skin irritation occurs: Get medical advice/ attention.
P337 + P313	If eye irritation persists: Get medical advice/attention.
P370 + P378	In case of fire: Use dry chemical or alcohol resistant foam for extinction.
P405	Store locked up.
P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P403 + P235	Store in a well-ventilated place. Keep cool.
P501	Dispose of contents/container to approved waste disposal plant

2.3 Hazards not otherwise classified or not covered by GHS

None

Section 3 - Composition / Information on Ingredients

Substance/Mixture

Chemical name : 3-Methylpentane

Synonyms : Diethylmethylmethane
Pentane, 3-methyl

Formula : C_6H_{14}

CAS number : 96-14-0

EC number : 202-481-4

Hazardous components

Component	Classification	Concentration
3-Methylpentane	Flammable liquids (Category 2) Skin irritation (Category 2) Eye irritation (Category 2A) Specific target organ toxicity – single exposure (Category 3) Aspiration hazard (Category 1) Acute aquatic toxicity (Category 2) Chronic aquatic toxicity (Category 2)	99%

Section 4 - First Aid Measures

4.1 Description of necessary first aid measures

If inhaled
Remove person to fresh air. Consult a physician if necessary.
If breathing is stopped, administer artificial respiration if trained to do so.

In case of skin contact
Flush with copious amounts of water for at least 15 minutes. Consult a physician if necessary.

In case of eye contact
Flush with copious amounts of water for at least 15 minutes. Consult a physician if necessary.

If ingested

Do NOT induce vomiting. Rinse mouth out with water. Never give liquid to an unconscious person. Consult a physician if necessary.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labeling section 2.2.

4.3 Indication of immediate medical attention and special treatment needed, if necessary

No data available.

Section 5 – Fire Fighting Measure

5.1 Extinguishing media

Suitable extinguishing media

Water spray, alcohol resistant foam, carbon dioxide, dry chemical.

Unsuitable extinguishing media

None.

5.2 Specific hazards arising from the chemical

No data available.

5.3 Special protective equipment for fire fighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH for firefighters (approved or equivalent) and full protective gear.

5.4 Special precautions for fire fighters

Cool vessels and containers with sprayed water. Containers may explode when heated. Vapours can accumulate in low areas. Evacuate all personnel from the danger area. Remove ignition sources if safe to do so. Vapors can be ignited by pilot lights, other flames, smoking, sparks, heaters, electrical equipment, static discharge, or other ignition sources at locations distant from product release point.

Section 6 – Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures.

Use personal protective equipment. Wear self-contained breathing apparatus when entering area unless atmosphere is proven to be safe. Avoid breathing vapours, mist or gas. Prevent further leakage or spillage if safe to do so. Ensure adequate ventilation, especially in confined areas. Remove all sources of ignition. Evacuate personnel to safe areas. Prevent contamination of soil, drains and surface water. Take up residue with absorbent material and dispose of in accordance with all local, state and federal regulations.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so.
Prevent entry into waterways, sewers, basements or confined areas.

6.3 Methods and materials for containment and cleaning up

Utilize non-sparking tools. For large spills, dike far ahead of liquid spill for later disposal. Pump up spilled material and transfer to properly labeled containers and dispose of in accordance with all local, state and federal regulations.
Collect with an electrically protected vacuum cleaner

Section 7 – Handling and Storage

7.1 Precautions for safe handling

Wear all appropriate personal protective equipment. Avoid contact with skin, eyes and clothing. Avoid vapour inhalation. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Ensure good ventilation and local exhaust extraction in work place. Keep away from source of ignition. Use only non-sparking tools. Use only explosion-proof equipment. Take measures to prevent buildup of electrostatic charge. Keep containers tightly closed when not in use

7.2 Conditions for safe storage, including any incompatibilities

Store material in D.O.T. approved containers. Follow all applicable local, state, and federal regulations. Store in a cool, dry, well-ventilated place, in securely closed original container. Store away from oxidizers

Section 8 – Exposure Controls / Personal Protection

8.1 Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
3-Methylpentane	TWA 500 ppm, USA. ACGIH (TLV) STEL 1,000 ppm, USA. ACGIH (TLV) TWA 500 ppm, USA. OSHA STEL 1,000 ppm, USA. OSHA TWA 100 ppm, USA. NIOSH (REL) C 510 ppm, USA. NIOSH (REL)

8.2 Appropriate engineering controls

Engineering Controls:
Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area. Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs.

8.3 Individual protection measures

Administrative Controls:
Handle in accordance with good industrial hygiene and safety practice.
When workplace conditions warrant respirator use, follow a respiratory protection program that meets OSHA 29 CFR 1910.134, ANSI Z88.2, or MSHA 30 CFR 72.710 (where applicable). Use an air-supplied or air-purifying cartridge if the action level is exceeded. Ensure that the respirator has the appropriate protection factor for the exposure level. If cartridge type respirators are used, the cartridge must be appropriate for the chemical exposure (e.g., an organic vapor cartridge). For emergencies or instances with unknown exposure levels, use a self-contained breathing apparatus (SCBA).

Wear face shield and safety glasses as approved under appropriate government standards (NIOSH or EN 166). Wear chemically protective gloves. Wear a chemically protective suit. Wear flame retardant protective clothing. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.

Section 9 – Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Appearance	: Clear, colourless liquid.
Odour	: No data available.
Odour Threshold	: No data available.
pH	: No data available.
Melting point/freezing point	: -162.9 °C (-261.2 °F)
Initial boiling point and boiling point range	: 63.3 °C (145.9 °F)
Flash point	: -7 °C (19 °F) (Closed cup)
Evaporation rate	: No data available.
Flammability (solid, gas)	: No data available.
Upper/lower flammability Or explosive limits	: Lower flammability limit: 1.2% (V) Upper flammability limit: 7.0% (V)
Vapour pressure	: 190 mm Hg at 25 °C
Vapour density	: 2.97 (Air=1)
Relative density	: .664 g/cm^3 at 25 °C
Water solubility	: 17.9 mg/L at 25 °C

Partition coefficient: n-octanol/water	:	log Pow: 3.416
Auto-ignition Temperature	:	278 °C (532 °F)
Decomposition Temperature	:	No data available.
Viscosity	:	0.307 cP at 25 °C
Molecular weight	:	86.15 g/mol

Section 10 – Stability and Reactivity

10.1 Reactivity
No data available.

10.2 Chemical stability
This material is stable at room temperature in closed containers under normal storage and handling conditions.

10.3 Possibility of hazardous reactions
Vapours may form explosive mixture in air.

10.4 Conditions to avoid
Avoid contact with strong oxidizing agents. Heat, flames and other sources of ignition. Take measures to prevent buildup of electrostatic charge. Reacts violently with oxidants causing fire and explosion hazard.

10.5 Incompatible materials
Can react vigorously with oxidizing materials.

10.6 Hazardous decomposition products
Thermal oxidative decomposition of this material can produce sulfur oxides

Section 11 – Toxicological Information

11.1 Information on toxicological effects

Acute toxicity
No data available.

Skin corrosion/irritation

No data available.

Serious eye damage/eye irritation
No data available.

Respiratory or skin sensitization
Repeated or prolonged exposure may cause allergic reactions in certain sensitive individuals.

Germ cell mutagenicity
No data available.

Carcinogenicity

ARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH.

NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

Reproductive toxicity
No data available.

Specific target organ toxicity – single exposure
Mat cause drowsiness or dizziness.

Specific target organ toxicity – repeated exposure
No data available.

Aspiration hazard
The substance or mixture is known to cause human aspiration toxicity hazards

Information on the likely routes of exposure
Inhalation, Skin and eye contact, Ingestion

Symptoms related to the physical, chemical and toxicological characteristics
CNS depression, dizziness, irritation,

Delayed and immediate effects and also chronic effects from short and long-term exposure

No data available.

Numeric measures of toxicity
No data available.

Section 12 – Ecological Information

12.1 Toxicity
No data available.

12.2 Persistence and degradability
No data available.

12.3 Bioaccumulative potential
No data available.

12.4 Mobility in soil
Slight.

12.5 Other adverse effects
Toxic to aquatic life with long lasting effects.

Section 13 – Disposal Considerations

13.1 Disposal Methods
Follow all applicable local, state, and federal regulations.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 14 – Transport Information

	DOT	IMDG	IATA
UN number	UN1208	UN1208	UN1208
Un proper shipping name	Hexanes	HEXANES, MARINE POLLUTANT	Hexanes
Transport hazard class	3	3	3
Packing group	II	II	II
Marine pollutant	-	Yes	-

Section 15 – Regulatory Information

SARA 302 Components
No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components
This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards
Fire hazard, Acute health hazard.

Section 16 – Other Information

	HMIS		
Health - Chronic	*		NFPA
Health Hazard	2	Health Hazard	2
Flammability	3	Fire Hazard	3
Physical	0	Reactivity	0

Prepared By:
Wiley Companies
The EH&S Department

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