



# MATERIAL SAFETY DATA SHEET

## 1. Product and Company Identification

**Material name** 2-METHYL-3-PENTYN-2-OL, 99%  
**Version #** 01  
**Issue date** March-05-2014  
**CAS #** 590-38-5  
**Product code** 3927  
**Manufacturer information** GFS Chemicals, Inc.  
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## 2. Hazards Identification

**Emergency overview** WARNING  
  
Combustible liquid.

### Potential health effects

**Eyes** Health injuries are not known or expected under normal use.  
**Skin** Health injuries are not known or expected under normal use.  
**Inhalation** Health injuries are not known or expected under normal use.  
**Ingestion** Health injuries are not known or expected under normal use.

## 3. Composition / Information on Ingredients

Components	CAS #	Percent
2-METHYL-3-PENTYN-2-OL	590-38-5	60 - 100

## 4. First Aid Measures

### First aid procedures

**Eye contact** Rinse with water. Get medical attention if irritation develops and persists.  
**Skin contact** Rinse skin with water/shower. Get medical attention if irritation develops and persists.  
**Inhalation** If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a physician if symptoms develop or persist.  
**Ingestion** Rinse mouth. If ingestion of a large amount does occur, call a poison control center immediately.

**General advice** If you feel unwell, seek medical advice (show the label where possible). Show this safety data sheet to the doctor in attendance.

## 5. Fire Fighting Measures

**Flammable properties** Combustible by WHMIS criteria. Heat may cause the containers to explode.

### Extinguishing media

**Suitable extinguishing media** Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).  
**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

## Protection of firefighters

### Protective equipment for firefighters

Firefighters should wear full protective clothing including self contained breathing apparatus.

### Fire fighting equipment/instructions

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA. If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also consider initial evacuation for 800 meters (1/2 mile) in all directions. ALWAYS stay away from tanks engulfed in flame. Withdraw immediately in case of rising sound from venting safety device or any discoloration of tanks due to fire. Move containers from fire area if you can do so without risk. In the event of fire, cool tanks with water spray. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out. Some of these materials, if spilled, may evaporate leaving a flammable residue.

## Explosion data

### Sensitivity to static discharge

Not available.

### Sensitivity to mechanical impact

Not available.

## 6. Accidental Release Measures

### Personal precautions

Keep unnecessary personnel away. Consider initial downwind evacuation for at least 500 meters (1/3 mile). Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak. Keep upwind. Ventilate closed spaces before entering them.

### Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not contaminate water.

### Methods for containment

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Dike the spilled material, where this is possible. Prevent entry into waterways, sewer, basements or confined areas.

### Methods for cleaning up

Extinguish all flames in the vicinity.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Cover with plastic sheet to prevent spreading. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills:

Never return spills in original containers for re-use. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. Clean up in accordance with all applicable regulations. For waste disposal, see section 13 of the MSDS.

### Other information

Clean up in accordance with all applicable regulations.

## 7. Handling and Storage

### Handling

DO NOT handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. All equipment used when handling the product must be grounded.

### Storage

Do not handle or store near an open flame, heat or other sources of ignition. Keep at temperature not exceeding 49 °C. This material can accumulate static charge which may cause spark and become an ignition source. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a well-ventilated place. Store in a closed container away from incompatible materials. Keep in an area equipped with sprinklers. Keep out of the reach of children.

## 8. Exposure Controls / Personal Protection

### Occupational exposure limits

No exposure limits noted for ingredient(s).

### Engineering controls

General ventilation normally adequate.

### Personal protective equipment

#### Eye / face protection

Not normally needed.

#### Skin protection

Normal work clothing (long sleeved shirts and long pants) is recommended.

**Respiratory protection**

No personal respiratory protective equipment normally required.

**9. Physical & Chemical Properties**

<b>Appearance</b>	Clear.
<b>Physical state</b>	Liquid.
<b>Form</b>	Liquid.
<b>Color</b>	Colorless.
<b>Odor</b>	Not available.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Vapor pressure</b>	Not available.
<b>Vapor density</b>	Not available.
<b>Boiling point</b>	273.2 °F (134 °C)
<b>Melting point/Freezing point</b>	7.7 °F (-13.5 °C) Lit.
<b>Solubility (water)</b>	Not available.
<b>Specific gravity</b>	0.873
<b>Relative density</b>	Not available.
<b>Flash point</b>	159.80 °F (71.00 °C) Lit.
<b>Flammability limits in air, upper, % by volume</b>	Not available.
<b>Flammability limits in air, lower, % by volume</b>	Not available.
<b>Auto-ignition temperature</b>	Not available.
<b>Molecular weight</b>	98.15
<b>Molecular formula</b>	C6-H10-O
<b>Other data</b>	
<b>Density</b>	0.87 g/cm3
<b>Flammability class</b>	Combustible IIIA estimated

**10. Chemical Stability & Reactivity Information**

<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Conditions to avoid</b>	Avoid temperatures exceeding the flash point.
<b>Incompatible materials</b>	Not available.
<b>Hazardous decomposition products</b>	Not available.

**11. Toxicological Information**

<b>Acute effects</b>	The toxicological properties of this material have not been fully investigated and its handling and use may be hazardous.
<b>Chronic effects</b>	Not expected to be hazardous by WHMIS criteria.

**12. Ecological Information**

<b>Persistence and degradability</b>	Not available.
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**13. Disposal Considerations**

<b>Disposal instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Incinerate the material under controlled conditions in an approved incinerator. Dispose in accordance with all applicable regulations.
<b>Contaminated packaging</b>	Empty containers should be taken to an approved waste handling site for recycling or disposal.

**14. Transport Information****TDG**

Not regulated as dangerous goods.

**IATA**

Not regulated as dangerous goods.

**IMDG**

Not regulated as dangerous goods.

**15. Regulatory Information****Canadian regulations**

This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

**WHMIS status**

Controlled

**WHMIS classification**

B3 - Combustible Liquids

**WHMIS labeling****Inventory status**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	No
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	No

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

**16. Other Information****HMIS® ratings**

Health: 0  
Flammability: 2  
Physical hazard: 0

**NFPA ratings**

Health: 0  
Flammability: 2  
Instability: 0

**Disclaimer**

The information in the sheet was written based on the best knowledge and experience currently available. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

**This data sheet contains changes from the previous version in section(s):**

Physical & Chemical Properties: Multiple Properties