



## MATERIAL SAFETY DATA SHEET

**Product identifier:** GC12, GC12-HA  
**Product use:** Aerosol propellant for use with Hilti GX 100 fastening tool  
**Supplier:** Hilti (Canada) Corporation, 2360 Meadowpine Blvd., Mississauga, Ontario L5N 6S2  
**Originator:** Hilti, Inc., P. O. Box 21148, Tulsa, Oklahoma, USA 74121  
**Emergency number:** Chem-Trec: 1 800 424 9300

## INGREDIENTS INFORMATION

Ingredient	CAS Number	% (wt.)	LC <sub>50</sub> , (rat)	LD <sub>50</sub> (rat)	TLV	STEL
Isobutane	075-28-5	10 - 30	57 pph/15 min	N/Av	N/E	N/E
Dimethyl ether	115-10-6	30 - 60	30,800 mg/m <sup>3</sup>	N/Av	N/E	N/E
Ethanol	064-17-5	10 - 30	20,000 ppm/10 hr	7,060 mg/kg	1000 ppm	N/E
Propylene	115-07-1	30 - 60	>50,000 ppm / 4 hr	N/Av	NE	N/E
Propane, liquefied *	074-98-6	100	N/Av	N/Av	N/Av *	N/E

\* Propane / Butane mixture remains in the can and is not released.

## PHYSICAL PROPERTIES

<b>Appearance / Physical state:</b>	Colorless aerosol.	<b>Odour:</b>	Alcohol odor
<b>Specific gravity (at 20°C):</b>	Not determined.	<b>Odour threshold:</b>	Not determined.
<b>Vapour pressure (at 20°C):</b>	5-20 bar @ 50 C.	<b>Vapour density:</b>	Not determined.
<b>Evaporation rate:</b>	Not determined.	<b>Boiling point:</b>	Not determined.
<b>Freezing point:</b>	Not determined.	<b>pH:</b>	Not determined.
<b>Coefficient of H<sub>2</sub>O / oil distrib:</b>	Not determined.	<b>Solubility in water:</b>	Negligible.

## FIRE AND EXPLOSION DATA

<b>Flash point / Method:</b>	< 0° F / < -18° C closed cup	<b>Flammable limits:</b>	1 – 32%
<b>Conditions of flammability:</b>	Not determined.	<b>Auto-ignition temperature:</b>	Not determined.
<b>Means of extinction:</b>	Water, CO <sub>2</sub> , Dry Chemical, Foam.		
<b>Special fire fighting procedures:</b>	Extremely flammable. Contents under pressure. Containers exposed to fire can burst or be propelled through the air.		
<b>Hazardous combustion products:</b>	Typical thermal decomposition products can be formed; e.g. CO, SO <sub>2</sub> and NO <sub>x</sub> .		
<b>Sensitivity to mechanical impact / static discharge:</b>	Susceptible to a static discharge.		

## REACTIVITY DATA

<b>Stability:</b>	Stable.	<b>Conditions of reactivity:</b>	None known.
<b>Incompatible materials:</b>	Oxidizing materials.		
<b>Hazardous decomposition products:</b>	Thermal decomposition products can be formed; e.g. CO, SO <sub>2</sub> and NO <sub>x</sub> .		

## TOXICOLOGICAL PROPERTIES

<b>Likely routes of exposure:</b>	<input type="checkbox"/> None known <input checked="" type="checkbox"/> Skin contact <input type="checkbox"/> Skin absorption <input checked="" type="checkbox"/> Eye contact <input checked="" type="checkbox"/> Inhalation		
<b>Exposure limits:</b>	See "Ingredients" section above.		
<b>Acute effects of exposure:</b>	<b>Contact:</b> No effects expected from normal use. Direct contact with liquefied gas (e.g. from a leaking can) can cause severe irritation and possibly burns (i.e. frostbite). <b>Inhalation:</b> No ill effects expected from normal use. Contains asphyxiant gases. Direct inhalation of gases can cause narcotic effects. <b>Ingestion:</b> Not a likely route of exposure.		
<b>Chronic effects of exposure:</b>	None known.		
<b>Synergistic materials:</b>	None known.		

**FIRST AID MEASURES**

<b>Eyes:</b>	For contact with liquefied gas, flush immediately with plenty of water and transport to a medical facility.
<b>Skin:</b>	If contact with liquefied (cold) gases occurs, hold under warm running water. Do not use hot water. Do not rub the skin. Seek medical attention.
<b>Inhalation:</b>	Move victim to fresh air. Call a physician if symptoms persist.
<b>Ingestion:</b>	Not a likely route of exposure.
<b>Other:</b>	Referral to a physician is recommended if there is any question about the seriousness of the injury/exposure

**PREVENTIVE MEASURES**

<b>Engineering controls:</b>	General (natural or mechanically induced fresh air movements).
<b>Eye protection:</b>	Safety glasses with side shields recommended.
<b>Skin protection:</b>	Leather or heavy cloth gloves are recommended.
<b>Respiratory protection:</b>	None normally required.
<b>Other:</b>	No additional measures are normally required.
<b>Handling procedures and equipment:</b>	For industrial use only. Follow label / use instructions. Extremely flammable gas under pressure. Keep away from excessive heat, sparks, flames and any other potential ignition sources. Do not allow liquefied gases to come in contact with the skin. Use with adequate ventilation.
<b>Storage requirements:</b>	Keep out of reach of children. Store in a cool dry area. Keep from freezing. Do not store in direct sunlight. Store between 5° and 25° C. Do not store with DX Cartridges (Boosters).
<b>Spill, leak or release:</b>	Immediately remove any ignition sources. Wear appropriate personal protective equipment. Provide adequate ventilation to disperse gases.
<b>Waste disposal:</b>	Consult with regulatory agencies or your corporate personnel for disposal methods that comply with local, provincial, and federal safety, health and environmental regulations.
<b>Special shipping instructions:</b>	Avoid temperature extremes. Keep from freezing.

**REGULATORY INFORMATION**

<b>WHMIS classification:</b>	A, B1, D2B
<b>HMIS codes:</b>	Health 1, Flammability 4, Reactivity 0, PPE b
<b>TDG shipping name:</b>	Consumer commodity
<b>IATA (air) Shipping Name:</b>	Devices, small, hydrocarbon gas powered <i>with release device</i> , Class 2.1, UN3150

**PREPARATION INFORMATION / CONTACTS**

<b>Prepared by:</b>	Hilti, Inc., Tulsa, OK USA	Date of Preparation: May 23, 2012	<b>Emergency phone number:</b>	<b>1 800 424 9300</b>
<b>Customer Service:</b>	Hilti (Canada) Corporation, Mississauga, Ontario; 1 800 363 4458			
<b>Health / Safety contacts:</b>	Hilti, Inc., Tulsa, OK USA; 1 800 879 6000      Jerry Metcalf (x1003704)			
<b>Abbreviations used:</b>	<b>N/E</b> = None Established. <b>N/Ap</b> = Not Applicable. <b>N/Av</b> = Not Available. <b>HMIS:</b> Hazardous Materials Identification System			

The information and recommendations contained herein are based upon data believed to be correct; however, no guarantee or warranty of any kind expressed or implied is made with respect to the information provided.