



# SAFETY DATA SHEET

## Terr-O-Gas® 75

Version: 1.0

Revision Date: 05/14/2015

Print Date: 07/07/2016

### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name: Terr-O-Gas® 75

Product Use Description: EPA Registered Pesticide

Company: Chemtura Corporation  
199 Benson Road  
Middlebury, CT  
06749  
United States of America  
  
Telephone: (US) +1 866-430-2775

Emergency telephone number: CHEMTREC: (24 hours) 800-424-9300  
:  
Chemtura Corporation Emergency Response: CHEMTURA : 800-292-5898

For additional emergency telephone numbers see section 16 of the Safety Data Sheet.

Prepared by Product Safety Department  
(US) +1 866-430-2775  
  
MSDSRequest@chemtura.com

Recommended use of the chemical and restrictions on use

Recommended use : EPA Registered Pesticide

### SECTION 2. HAZARDS IDENTIFICATION

Form	gas
Colour	colourless
Odour	Intensely irritating tear gas

#### GHS Classification

Flammable gases : Category 1  
Acute toxicity (Oral) : Category 3  
Acute toxicity (Inhalation) : Category 2  
Skin irritation : Category 2  
Eye irritation : Category 2A  
Germ cell mutagenicity : Category 2  
Specific target organ toxicity - single exposure : Category 3 (Respiratory system)  
Specific target organ toxicity - repeated exposure : Category 2  
(Inhalation)



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Acute aquatic toxicity : Category 1

### GHS Label element

Signal word : **Danger**

Hazard pictograms :



Hazard statements : H220 Extremely flammable gas.  
H301 Toxic if swallowed.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H330 Fatal if inhaled.  
H335 May cause respiratory irritation.  
H341 Suspected of causing genetic defects.  
H373 May cause damage to organs through prolonged or repeated exposure if inhaled.  
H400 Very toxic to aquatic life.

Other hazards : None

Precautionary statements : **Prevention:**  
P201 Obtain special instructions before use.  
P202 Do not handle until all safety precautions have been read and understood.  
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.  
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.  
P264 Wash skin thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P271 Use only outdoors or in a well-ventilated area.  
P273 Avoid release to the environment.  
P280 Wear eye protection/ face protection.  
P280 Wear protective gloves.  
P281 Use personal protective equipment as required.  
P284 Wear respiratory protection.  
**Response:**  
P301 + P310 + P330 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician. Rinse mouth.  
P302 + P352 IF ON SKIN: Wash with plenty of soap and water.  
P304 + P340 + P310 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.  
P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P308 + P313 IF exposed or concerned: Get medical advice/ attention.



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P332 + P313 If skin irritation occurs: Get medical advice/ attention.  
P337 + P313 If eye irritation persists: Get medical advice/ attention.  
P362 Take off contaminated clothing and wash before reuse.  
P377 Leaking gas fire: Do not extinguish, unless leak can be stopped safely.  
P381 Eliminate all ignition sources if safe to do so.  
P391 Collect spillage.

### Storage:

P403 Store in a well-ventilated place.  
P403 + P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.

### Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

### Carcinogenicity:

#### IARC

Group 3: Not classifiable as to its carcinogenicity to humans

bromomethane 74-83-9

chloromethane 74-87-3

#### 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.

#### 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.

### Environmental Effects

Environmental Effects : Dangerous for the environment

## SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

### Hazardous components

Chemical Name	CAS-No.	Concentration (%)
bromomethane	74-83-9	>= 70 - < 90 %
trichloronitromethane	76-06-2	>= 20 - < 30 %
chloromethane	74-87-3	>= 0.1 - < 1 %

## SECTION 4. FIRST AID MEASURES

If inhaled : Get medical attention immediately.  
If breathed in, move person into fresh air.  
Give oxygen or artificial respiration if needed.

In case of skin contact : Get medical attention immediately.  
Take off contaminated clothing and shoes immediately.



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- Wash off immediately with plenty of water for at least 15 minutes.  
Wash contaminated clothing before re-use.  
Destroy contaminated shoes.
- In case of eye contact : Get medical attention immediately.  
Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes. Get medical attention.
- If swallowed : Call a physician or poison control centre immediately.  
Do NOT induce vomiting.  
Rinse mouth with water.  
Never give anything by mouth to an unconscious person.

### SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : All conventional media are suitable.
- Specific hazards during firefighting : Burning produces noxious and toxic fumes.  
Thermal decomposition can lead to release of irritating gases and vapours.  
Container may explode if heated.  
Keep containers and surroundings cool with water spray.  
Non-flammable in concentrated form. Methyl bromide is ignitable by a high energy spark at the flammability limits listed in Section 9.  
Heated material decomposes violently at 112 degrees C to severely toxic gases, especially in contact with metals.
- Specific extinguishing methods : In the event of fire, wear self-contained breathing apparatus.  
Wear personal protective equipment.
- Special protective equipment for firefighters : Wear full protective clothing and self-contained breathing apparatus.  
Wear suitable protective clothing, gloves and eye/face protection.

### SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : For personal protection see section 8.
- Environmental precautions : These products are toxic to fish and wildlife. Keep out of lakes, streams and ponds. Do not contaminate water by cleaning of equipment or disposal of wastes.



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### SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Methyl bromide has no odor at dangerous levels and is extremely hazardous.  
Use personal protective equipment as required.  
Do not contaminate water, food or feed by storage or disposal.  
Avoid contact with skin, eyes and clothing.  
Do not breathe vapours or spray mist.  
Persons moving or handling containers should wear protective clothing. Open container only in a well-ventilated area wearing protective clothing and respiratory protection if necessary.  
Cylinders should not be subjected to rough handling or mechanical shock such as dropping, bumping, dragging, or sliding. Do not use rope slings, hooks, tongs, or similar devices to unload cylinders. Transport cylinders using hand truck, fork truck or other device to which the cylinder can be firmly secured. Do not remove valve protection bonnet and safety cap until immediately before use. Replace safety cap and valve protection bonnet when cylinder is not in use.  
When cylinder is empty close, valve, screw safety cap onto valve outlet, and replace protection bonnet before returning to shipper. Only a registrant is authorized to refill cylinders. Do not use cylinders for any other purpose.
- Conditions for safe storage : Store in upright position only.  
Keep in a dry, cool and well-ventilated place.  
Store locked up.  
Post as a pesticide storage area.  
Store cylinders upright, secured to a rack or wall to prevent tipping.  
Keep away from direct sunlight.  
Keep away from flames and sparks.  
Keep away from heat and sources of ignition.  
Keep container tightly closed.
- Materials to avoid : Aluminium, Magnesium, Zinc, Alkali metals, Strong bases, Organic amines, Reducing agents, sulphuric acid, Incompatible with containers or equipment made of aluminum, magnesium or their alloys.

### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

Components	CAS-No.	Form of exposure	Permissible concentration	Basis
bromomethane	74-83-9	TWA	1 ppm	ACGIH
		C	20 ppm 80 mg/m3	OSHA Z-1



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		TWA	5 ppm 20 mg/m <sup>3</sup>	OSHA P0
trichloronitromethane	76-06-2	TWA	0.1 ppm	ACGIH
		TWA	0.1 ppm 0.7 mg/m <sup>3</sup>	OSHA Z-1
		TWA	0.1 ppm 0.7 mg/m <sup>3</sup>	OSHA P0
		TWA	0.1 ppm 0.7 mg/m <sup>3</sup>	NIOSH REL
chloromethane	74-87-3	TWA	50 ppm	ACGIH
		STEL	100 ppm	ACGIH
		TWA	100 ppm	OSHA Z-2
		CEIL	200 ppm	OSHA Z-2
		Peak	300 ppm	OSHA Z-2
		TWA	50 ppm 105 mg/m <sup>3</sup>	OSHA P0
		STEL	100 ppm 205 mg/m <sup>3</sup>	OSHA P0

**Engineering measures** : Use local ventilation to keep levels below established threshold values.  
Adequate general ventilation is recommended when handling to control airborne levels.  
Do not use in areas without adequate ventilation.  
Use mechanical ventilation for general area control.

### Personal protective equipment

**Respiratory protection** : When an air purifying respirator is required, (see product label for requirements) wear a NIOSH-certified full-face piece air purifying respirator with cartridges certified by the manufacturer for protection from exposure to methyl bromide at concentrations up to 5 ppm (e.g., a 3M air-purifying respirator equipped with 3M Model 60928 Organic Vapor/Acid Gas/P100 cartridges).  
Use a direct reading detection device for determining methyl bromide and chloropicrin air concentrations. Detection devices must have a sensitivity of at least 1 ppm for methyl bromide and 0.15 ppm for Chloropicrin. Device manufacturers instructions must be followed.  
For protection from concentrations greater than 50 times the PEL, wear a NIOSH/MSHA approved self contained breathing apparatus (SCBA). All persons entering the treatment area/affected area must wear a NIOSH/MSHA approved SCBA if the air concentration of methyl bromide and chloropicrin is unknown, or, if (1) the methyl bromide concentration is measured at greater than 5 ppm, or (2) the air concentration of chloropicrin is measured at greater than 1.5 ppm.  
In emergencies such as a spill or leak, or when corrective action is needed to reduce air concentrations to acceptable levels, wear a SCBA and PPE required for potential contact with fumigant liquid.  
During routine fumigation activities, an air-purifying respirator



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is required if, sensory irritation is experienced, or the air concentration of methyl bromide is measured between 1 ppm and 5 ppm, or the air concentration of chloropicrin is measured between 0.15 ppm and 1.5 ppm.

Air monitoring must be conducted to ensure that the upper protection limit of the air-purifying respirator is not exceeded (e.g., 5 ppm for methyl bromide and 1.5 ppm for chloropicrin). If the upper protection limits of the air-purifying respirator are exceeded or if the handler experiences sensory irritation while wearing the respirator, the handler must leave the area until certain conditions are met. See product label for further instructions. An air-purifying respirator is not required if the air concentration of methyl bromide is measured at less than 1 ppm and the chloropicrin is measured at less than 0.15 ppm and no sensory irritation is experienced.

**IMPORTANT:** A self-contained breathing apparatus (SCBA) is not permitted for routine handler tasks.

Consult the OSHA respiratory protection information located at 29CFR1910.134 and the American National Standard Institute's Practices of Respiratory Protection Z88.2.

Due to the poor warning properties regarding the chemical(s) of concern, negative pressure air purifying respirators are not recommended at any exposure level in excess of the exposure limit values.

### Hand protection Remarks

: When performing tasks with potential for contact with liquid fumigant, wear chemical protective gloves; If there is NO potential for contact with liquid fumigant, do NOT wear gloves.

### Eye protection

: When performing tasks with potential for contact with liquid fumigant, wear protective eyewear.  
Do NOT wear goggles.

### Skin and body protection

: Loose-fitting or well ventilated long-sleeved shirt and long pants and shoes\* and socks. Do NOT wear jewelry, tight clothing, rubber protective clothing or rubber boots when handling.  
\*When performing tasks with potential for contact with liquid fumigant, wear chemical-resistant footwear with socks and wear a chemical-resistant apron.

### Hygiene measures

: Wash thoroughly after handling.  
For personal hygiene purposes, use adequate clothing to prevent skin contact.  
Make sure piping is empty before doing maintenance work.  
All persons working with methyl bromide/chloropicrin should be trained in the hazards, use of required respirator equipment, emergency procedures and in the proper use of methyl bromide/chloropicrin as a fumigant where applicable.  
**NOTE TO END-USERS:** The employee protection recommendations on this SDS may differ from those on the product label. For normal use of this product, always refer to the personal protective equipment requirements on the product label.



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### SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: gas
Color	: colourless
Odor	: Intensely irritating tear gas
pH	: No data available
Melting point/range	: -64 °C Chloropicrin
Boiling point/boiling range	: 3.56 °C Methyl bromide 112.0 °C Chloropicrin
Flash point	: Not applicable
Upper explosion limit	: ca. 15 %(V) Methyl bromide
Lower explosion limit	: ca. 10 %(V) Methyl bromide
Vapour pressure	: 1,900 hPa (20 °C) 1420 mm Hg Methyl bromide 24.4 hPa (20 °C) 18.3 mm Hg Chloropicrin
Relative vapour density	: ca. 5.7 Chloropicrin ca. 3.27 Methyl bromide
Relative density	: No data available
Bulk Density	: No data available
Density	: No data available
<u>Solubility(ies)</u>	
Water solubility	: ca. 17.5 g/l Methyl bromide (20 °C)  2 g/l Chloropicrin (20 °C)
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Viscosity	
Viscosity, kinematic	: No data available Not applicable





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### SECTION 10. STABILITY AND REACTIVITY

Possibility of hazardous reactions	: Will not occur.
Conditions to avoid	: None known.
Incompatible materials	: Aluminium Magnesium Zinc Alkali metals Strong bases Organic amines Reducing agents sulphuric acid Incompatible with containers or equipment made of aluminum, magnesium or their alloys.
Hazardous decomposition products	: Carbon oxides Nitrogen oxides (NOx) Hydrogen halides Phosgene

### SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity (Product)	: Acute toxicity estimate: 249.94 mg/kg Method: Calculation method
Acute inhalation toxicity (Product)	: Acute toxicity estimate: Exposure time: 4 h Method: Calculation method
Acute dermal toxicity trichloronitromethane (Component)	: LD50 Dermal: 100 mg/kg Species: Rat

### SECTION 12. ECOLOGICAL INFORMATION

#### Further information on ecology



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Additional ecological information (Product) : These products are toxic to fish and wildlife. Keep out of lakes, streams and ponds. Do not contaminate water by cleaning of equipment or disposal of wastes.

(Product) : These products are toxic to fish and wildlife. Keep out of lakes, streams and ponds. Do not contaminate water by cleaning of equipment or disposal of wastes.

### SECTION 13. DISPOSAL CONSIDERATIONS

#### Disposal methods

Waste from residues : Pesticide wastes are toxic. Dispose of waste material in compliance with all federal, state, and local regulations.

### SECTION 14. TRANSPORT INFORMATION

#### DOT

UN number : 1581  
Description of the goods : Chloropicrin and methyl bromide mixtures (Methyl bromide, chloropicrin)  
Class : 2.3  
Environmentally hazardous : yes  
chloropicrin  
Poison Inhalation Hazard - Zone B

#### IATA

UN number : 1581  
Class : 2.3  
Not permitted for transport

#### IMDG

UN number : 1581  
Description of the goods : CHLOROPICRIN AND METHYL BROMIDE MIXTURE (Methyl bromide, chloropicrin)  
Class : 2.3  
EmS Number 1 : F-C  
EmS Number 2 : S-U  
Marine pollutant : yes  
chloropicrin



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### SECTION 15. REGULATORY INFORMATION

#### EPCRA - Emergency Planning and Community Right-to-Know Act

##### CERCLA Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
bromomethane	74-83-9	1000	1336

##### SARA 304 Extremely Hazardous Substances Reportable Quantity

Components	CAS-No.	Component RQ (lbs)	Calculated product RQ (lbs)
bromomethane	74-83-9	1000	1336

**SARA 311/312 Hazards** : Fire Hazard  
Acute Health Hazard  
Chronic Health Hazard

**SARA 302** : The following components are subject to reporting levels established by SARA Title III, Section 302:  
bromomethane 74-83-9

**SARA 313** : The following components are subject to reporting levels established by SARA Title III, Section 313:  
trichloronitromethane 76-06-2  
bromomethane 74-83-9  
The following components are subject to reporting levels established by SARA Title III, Section 313:  
bromomethane 74-83-9  
trichloronitromethane 76-06-2

**California Prop 65** WARNING: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm.

bromomethane 74-83-9  
chloromethane 74-87-3

#### The components of this product are reported in the following inventories:

**US.TSCA** On TSCA Inventory  
**DSL** All components of this product are on the Canadian DSL.  
**AICS** On the inventory, or in compliance with the inventory  
**NZIoC** On the inventory, or in compliance with the inventory  
**ENCS** On the inventory, or in compliance with the inventory  
**KECI** On the inventory, or in compliance with the inventory  
**PICCS** On the inventory, or in compliance with the inventory  
**IECSC** On the inventory, or in compliance with the inventory

### SECTION 16. OTHER INFORMATION



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### Further information

#### Other Emergency Phone Number

<u>Latin America:</u>	Brazil	+55 113 711 9144
	All other countries	+44 (0) 1235 239 670
<u>Mexico:</u>		+52 555 004 8763

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. 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.