

SAFETY DATA SHEET

Preconditioner Unit_temperature -90C

Section 1. Identification

This product is considered an article. This Safety Data Sheet is written based on the encapsulated substance or mixture in this article.

1.1 Product identifier

- Product name** : Preconditioner Unit_temperature -90C
- Part no. (chemical kit)** : G5222-60003, G5222-60004, G5222-60005, G5222-60006, G5222-60007, G5222-60008, G5222-69003, G5222-69003-DEF, G5222-69004, G5222-69004-DEF, G5222-69005, G5222-69005-DEF, G5222-69006, G5222-69006-DEF, G5222-69007, G5222-69007-DEF, G5222-69008, G5222-69008-DEF
- Part no.** : 1150 ETHYLENE Not available.
 Halocarbon R-14 (Tetrafluoromethane) Not available.
 Genetron AZ-50 (R-507) Not available.
- Validation date** : 2/26/2018

1.2 Relevant identified uses of the substance or mixture and uses advised against

- Material uses** : Reagents and Standards for Analytical Chemistry Laboratory Use
- | | |
|---|--|
| <input checked="" type="checkbox"/> 1150 ETHYLENE | 0.98 oz (in hermetic refrigeration system) |
| Halocarbon R-14 (Tetrafluoromethane) | ≤ 1.24 oz (in hermetic refrigeration system) |
| Genetron AZ-50 (R-507) | 1.02 oz (in hermetic refrigeration system) |

1.3 Details of the supplier of the safety data sheet

- Supplier/Manufacturer** : Agilent Technologies, Inc.
 5301 Stevens Creek Blvd
 Santa Clara, CA 95051, USA
 800-227-9770

1.4 Emergency telephone number

- In case of emergency** : CHEMTREC®: 1-800-424-9300

Section 2. Hazards identification

This article, when used under reasonable conditions and in accordance with the directions for use, should not present a health hazard. The substance or mixture is encapsulated in the article. Only if released due to use or processing of the article in a manner not in accordance with the product's directions for use it may present potential health and safety hazards.

2.1 Classification of the substance or mixture

- | | |
|---|--|
| <p>OSHA/HCS status : <input checked="" type="checkbox"/> 1150 ETHYLENE</p> <p>Halocarbon R-14 (Tetrafluoromethane)</p> <p>Genetron AZ-50 (R-507)</p> | <p>This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).</p> <p>This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).</p> <p>This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).</p> |
|---|--|

Classification of the substance or mixture

Section 2. Hazards identification

R1150 ETHYLENE

H220
H280
Simple Asphyx.
H336

FLAMMABLE GASES - Category 1
GASES UNDER PRESSURE - Compressed gas
SIMPLE ASPHYXIANTS
SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3

Halocarbon R-14 (Tetrafluoromethane)

H280
Simple Asphyx.

GASES UNDER PRESSURE - Liquefied gas
SIMPLE ASPHYXIANTS

Genetron AZ-50 (R-507)

H280
Simple Asphyx.

GASES UNDER PRESSURE - Compressed gas
SIMPLE ASPHYXIANTS

Ingredients of unknown toxicity

: R Genetron AZ-50 (R-507)

Percentage of the mixture consisting of ingredient (s) of unknown dermal toxicity: > 60%
Percentage of the mixture consisting of ingredient (s) of unknown oral toxicity: 30 - 60%

2.2 GHS label elements

Hazard pictograms

: R1150 ETHYLENE



Halocarbon R-14
(Tetrafluoromethane)



Genetron AZ-50 (R-507)



Signal word

: R1150 ETHYLENE
Halocarbon R-14
(Tetrafluoromethane)
Genetron AZ-50 (R-507)

Danger
Warning

Hazard statements

: R1150 ETHYLENE

Warning
H220 - Extremely flammable gas.
H280 - Contains gas under pressure; may explode if heated.
No Code(s) - May displace oxygen and cause rapid suffocation.
H336 - May cause drowsiness or dizziness.
H280 - Contains gas under pressure; may explode if heated.
No Code(s) - May displace oxygen and cause rapid suffocation.
H280 - Contains gas under pressure; may explode if heated.
No Code(s) - May displace oxygen and cause rapid suffocation.

Halocarbon R-14
(Tetrafluoromethane)

Genetron AZ-50 (R-507)

Precautionary statements


Section 2. Hazards identification


Prevention	: R1150 ETHYLENE	P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P271 - Use only outdoors or in a well-ventilated area. P261 - Avoid breathing gas. Not applicable.
	Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	Not applicable.
Response	: R1150 ETHYLENE	P304 + P340 + P312 - IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. P377 - Leaking gas fire: Do not extinguish, unless leak can be stopped safely. P381 - Eliminate all ignition sources if safe to do so. Not applicable.
	Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	Not applicable.
Storage	: R1150 ETHYLENE	P405 - Store locked up. P410 - Protect from sunlight. P403 - Store in a well-ventilated place. P410 - Protect from sunlight.
	Halocarbon R-14 (Tetrafluoromethane)	P403 - Store in a well-ventilated place. P410 - Protect from sunlight.
	Genetron AZ-50 (R-507)	P403 - Store in a well-ventilated place.
Disposal	: R1150 ETHYLENE	P501 - Dispose of contents and container in accordance with all local, regional, national and international regulations. Not applicable.
	Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	Not applicable.
Supplemental label elements	: R1150 ETHYLENE	Keep container tightly closed. Use only with adequate ventilation. Do not enter storage areas and confined spaces unless adequately ventilated. Keep container tightly closed. Use only with adequate ventilation. Do not enter storage areas and confined spaces unless adequately ventilated. Keep container tightly closed. Use only with adequate ventilation. Do not enter storage areas and confined spaces unless adequately ventilated.
	Halocarbon R-14 (Tetrafluoromethane)	Keep container tightly closed. Use only with adequate ventilation. Do not enter storage areas and confined spaces unless adequately ventilated.
	Genetron AZ-50 (R-507)	Keep container tightly closed. Use only with adequate ventilation. Do not enter storage areas and confined spaces unless adequately ventilated.
2.3 Other hazards		
Hazards not otherwise classified	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	None known. None known. None known.

Section 3. Composition/information on ingredients

This article, when used under reasonable conditions and in accordance with the directions for use, should not present a health hazard. The substance or mixture is encapsulated in the article. Only if released due to use or processing of the article in a manner not in accordance with the product's directions for use it may present potential health and safety hazards.

Section 3. Composition/information on ingredients

Substance/mixture	:  1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	Substance (encapsulated in article) Substance (encapsulated in article) Mixture (encapsulated in article)
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Ingredient name	%	CAS number
 1150 ETHYLENE Ethylene	100	74-85-1
Halocarbon R-14 (Tetrafluoromethane) carbon tetrafluoride	100	75-73-0


Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

4.1 Description of necessary first aid measures

Eye contact	:  1150 ETHYLENE	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
	Halocarbon R-14 (Tetrafluoromethane)	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
	Genetron AZ-50 (R-507)	Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention if irritation occurs.
Inhalation	:  1150 ETHYLENE	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
	Halocarbon R-14 (Tetrafluoromethane)	Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest

Section 4. First aid measures

occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Genetron AZ-50 (R-507)

Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. To avoid the risk of static discharges and gas ignition, soak contaminated clothing thoroughly with water before removing it. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse. Wash contaminated skin with soap and water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. In case of contact with liquid, warm frozen tissues slowly with lukewarm water and get medical attention. Do not rub affected area. Wash clothing before reuse. Clean shoes thoroughly before reuse. Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get medical attention if symptoms occur. Wash clothing before reuse. Clean shoes thoroughly before reuse.

Skin contact

:  1150 ETHYLENE

Halocarbon R-14
(Tetrafluoromethane)

Genetron AZ-50 (R-507)

Ingestion

:  1150 ETHYLENE

Halocarbon R-14
(Tetrafluoromethane)

As this product is a gas, refer to the inhalation section. Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if adverse health effects persist or are severe. Ingestion of liquid can cause burns similar to frostbite. If frostbite occurs, get medical attention. Never give anything by mouth to an unconscious person. If unconscious, place in

Section 4. First aid measures

Genetron AZ-50 (R-507)

recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. As this product rapidly becomes a gas when released, refer to the inhalation section. As this product is a gas, refer to the inhalation section.

4.2 Most important symptoms/effects, acute and delayed

Potential acute health effects

Eye contact

: R1150 ETHYLENE
Halocarbon R-14
(Tetrafluoromethane)
Genetron AZ-50 (R-507)

Contact with rapidly expanding gas may cause burns or frostbite.
Liquid can cause burns similar to frostbite.

Inhalation

: R1150 ETHYLENE
Halocarbon R-14
(Tetrafluoromethane)
Genetron AZ-50 (R-507)

Contact with rapidly expanding gas may cause burns or frostbite.
Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness. At very high concentrations, can displace the normal air and cause suffocation from lack of oxygen.
At very high concentrations, can displace the normal air and cause suffocation from lack of oxygen.
At very high concentrations, can displace the normal air and cause suffocation from lack of oxygen.

Skin contact

: R1150 ETHYLENE
Halocarbon R-14
(Tetrafluoromethane)
Genetron AZ-50 (R-507)

Contact with rapidly expanding gas may cause burns or frostbite.
Dermal contact with rapidly evaporating liquid could result in freezing of the tissues or frostbite.
Contact with rapidly expanding gas may cause burns or frostbite.

Ingestion

: R1150 ETHYLENE
Halocarbon R-14
(Tetrafluoromethane)
Genetron AZ-50 (R-507)

Can cause central nervous system (CNS) depression. As this product is a gas, refer to the inhalation section.
Ingestion of liquid can cause burns similar to frostbite.
As this product is a gas, refer to the inhalation section.

Over-exposure signs/symptoms

Eye contact

: R1150 ETHYLENE
Halocarbon R-14
(Tetrafluoromethane)
Genetron AZ-50 (R-507)

No specific data.
Adverse symptoms may include the following:

frostbite
No specific data.



Inhalation

: R1150 ETHYLENE
Halocarbon R-14
(Tetrafluoromethane)
Genetron AZ-50 (R-507)




Adverse symptoms may include the following:
nausea or vomiting
headache
drowsiness/fatigue
dizziness/vertigo
unconsciousness
No specific data.

No specific data.

Section 4. First aid measures

Skin contact	:  1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane)	No specific data. Adverse symptoms may include the following: frostbite
	Genetron AZ-50 (R-507)	No specific data.
Ingestion	:  1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane)	No specific data. Adverse symptoms may include the following: frostbite
	Genetron AZ-50 (R-507)	No specific data.


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

Notes to physician	:  1150 ETHYLENE	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
	Halocarbon R-14 (Tetrafluoromethane)	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
	Genetron AZ-50 (R-507)	In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.
Specific treatments	:  1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	No specific treatment. No specific treatment.
		No specific treatment.
Protection of first-aiders	:  1150 ETHYLENE	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
	Halocarbon R-14 (Tetrafluoromethane)	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.
	Genetron AZ-50 (R-507)	No action shall be taken involving any personal risk or without suitable training. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.


See toxicological information (Section 11)

Section 5. Fire-fighting measures

5.1 Extinguishing media


Suitable extinguishing media	:  1150 ETHYLENE	Use an extinguishing agent suitable for the surrounding fire.
	Halocarbon R-14 (Tetrafluoromethane)	Use an extinguishing agent suitable for the surrounding fire.
	Genetron AZ-50 (R-507)	Use an extinguishing agent suitable for the surrounding fire.

Section 5. Fire-fighting measures

Unsuitable extinguishing media :  1150 ETHYLENE
 Halocarbon R-14
 (Tetrafluoromethane)
 Genetron AZ-50 (R-507)


None known.
 None known.
 None known.

5.2 Special hazards arising from the substance or mixture

Specific hazards arising from the chemical :  1150 ETHYLENE

Halocarbon R-14
 (Tetrafluoromethane)
 Genetron AZ-50 (R-507)


Contains gas under pressure. Extremely flammable gas. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion.
 Contains gas under pressure. In a fire or if heated, a pressure increase will occur and the container may burst or explode.
 Contains gas under pressure. In a fire or if heated, a pressure increase will occur and the container may burst or explode.

Hazardous thermal decomposition products :  1150 ETHYLENE

Halocarbon R-14
 (Tetrafluoromethane)
 Genetron AZ-50 (R-507)

Decomposition products may include the following materials:
 carbon dioxide
 carbon monoxide
 Decomposition products may include the following materials:
 carbon dioxide
 carbon monoxide
 halogenated compounds
 carbonyl halides
 Decomposition products may include the following materials:
 carbon dioxide
 carbon monoxide
 halogenated compounds
 carbonyl halides

5.3 Advice for firefighters

Special protective actions for fire-fighters :  1150 ETHYLENE

Halocarbon R-14
 (Tetrafluoromethane)
 Genetron AZ-50 (R-507)

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Contact supplier immediately for specialist advice. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool. If involved in fire, shut off flow immediately if it can be done without risk. If this is impossible, withdraw from area and allow fire to burn. Fight fire from protected location or maximum possible distance. Eliminate all ignition sources if safe to do so.
 Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Contact supplier immediately for specialist advice. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.
 Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Contact supplier

Section 5. Fire-fighting measures

Special protective equipment for fire-fighters

: R1150 ETHYLENE

Halocarbon R-14
(Tetrafluoromethane)

Genetron AZ-50 (R-507)

immediately for specialist advice. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. For incidents involving large quantities, thermally insulated undergarments and thick textile or leather gloves should be worn.

Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Section 6. Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: R1150 ETHYLENE

Halocarbon R-14
(Tetrafluoromethane)

Genetron AZ-50 (R-507)

Accidental releases pose a serious fire or explosion hazard. No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing gas. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing gas. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Avoid breathing gas. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders

: R1150 ETHYLENE

Halocarbon R-14
(Tetrafluoromethane)

Genetron AZ-50 (R-507)

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel". If specialized clothing is required to deal with the

Section 6. Accidental release measures

spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

6.2 Environmental precautions

: R1150 ETHYLENE

Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Halocarbon R-14
(Tetrafluoromethane)

Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Genetron AZ-50 (R-507)

Ensure emergency procedures to deal with accidental gas releases are in place to avoid contamination of the environment. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up : R1150 ETHYLENE

Immediately contact emergency personnel. Stop leak if without risk. Use spark-proof tools and explosion-proof equipment.

Halocarbon R-14
(Tetrafluoromethane)
Genetron AZ-50 (R-507)

Immediately contact emergency personnel. Stop leak if without risk.

Immediately contact emergency personnel. Stop leak if without risk.

Section 7. Handling and storage

7.1 Precautions for safe handling

Protective measures : R1150 ETHYLENE

Put on appropriate personal protective equipment (see Section 8). Contains gas under pressure. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous. Do not puncture or incinerate container. Put on appropriate personal protective equipment (see Section 8). Contains gas under pressure. Do not get in eyes or on skin or clothing. Avoid breathing gas. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Empty containers retain product residue and can be hazardous. Do not puncture or

Halocarbon R-14
(Tetrafluoromethane)

Section 7. Handling and storage

	Genetron AZ-50 (R-507)	incinerate container. Put on appropriate personal protective equipment (see Section 8). Contains gas under pressure. Avoid contact with eyes, skin and clothing. Avoid breathing gas. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Empty containers retain product residue and can be hazardous. Do not puncture or incinerate container.
Advice on general occupational hygiene	: R1150 ETHYLENE	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	Halocarbon R-14 (Tetrafluoromethane)	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
	Genetron AZ-50 (R-507)	Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.
7.2 Conditions for safe storage, including any incompatibilities	: R1150 ETHYLENE	Do not store above the following temperature: 52°C (125.6°F). Store in accordance with local regulations. Store in a segregated and approved area. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Store locked up. Eliminate all ignition sources. Keep container tightly closed and sealed until ready for use. See Section 10 for incompatible materials before handling or use.
	Halocarbon R-14 (Tetrafluoromethane)	Do not store above the following temperature: 52°C (125.6°F). Store in accordance with local regulations. Store in a segregated and approved area. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Keep container tightly closed and sealed until ready for use. See Section 10 for incompatible materials before handling or use.
	Genetron AZ-50 (R-507)	Store in accordance with local regulations. Store in a segregated and approved area. Store away from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10). Keep container tightly closed and sealed until ready for use. See Section 10 for incompatible materials before handling or use.

Section 7. Handling and storage

7.3 Specific end use(s)

Recommendations	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	Industrial applications, Professional applications. Industrial applications, Professional applications. Industrial applications, Professional applications.
Industrial sector specific solutions	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	Not applicable. Not applicable. Not applicable.

Section 8. Exposure controls/personal protection

Since the hazardous ingredient in this article is encapsulated, the risk of exposure by inhalation, ingestion, skin contact and eyes contact is minimum.

8.1 Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
R1150 ETHYLENE Ethylene	ACGIH TLV (United States, 3/2017). TWA: 200 ppm 8 hours.
Halocarbon R-14 (Tetrafluoromethane) carbon tetrafluoride	ACGIH TLV (United States, 3/2017). TWA: 2.5 mg/m ³ , (as F) 8 hours. OSHA PEL 1989 (United States, 3/1989). TWA: 2.5 mg/m ³ , (as F) 8 hours. OSHA PEL Z2 (United States, 2/2013). TWA: 2.5 mg/m ³ 8 hours. Form: Dust OSHA PEL (United States, 6/2016). TWA: 2.5 mg/m ³ , (as F) 8 hours.

8.2 Exposure controls

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Section 8. Exposure controls/personal protection

- Hand protection** : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.
- Body protection** : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Other skin protection** : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
- Respiratory protection** : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

9.1 Information on basic physical and chemical properties




Appearance

Physical state	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	Gas. Gas. [Liquefied gas.]
Color	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	Colorless. Colorless.
Odor	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	Clear. / Colorless. Musty Odorless.
Odor threshold	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	Ethereal. [Slight] Not available. Not available.
pH	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	Not available. Not available.
Melting point	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	-169.4°C (-272.9°F) -183.6°C (-298.5°F) Not available.
Boiling point	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	-103.68°C (-154.6°F) -127.8°C (-198°F)
Flash point	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	-46.7°C (-52.1°F) Closed cup: -136°C (-212.8°F) Not available.
		Not applicable.

Section 9. Physical and chemical properties

Evaporation rate	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	Not available. Not available. >1 (CCl ₄ = 1 = 1)
Flammability (solid, gas)	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	Not available. Not available. Not available.
Lower and upper explosive (flammable) limits	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	Lower: 2.7% Upper: 36% Not available. Not available.
Vapor pressure	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	>101.3 kPa (>760 mm Hg) [room temperature] Not available. 1061.1 kPa (7959 mm Hg) [room temperature] 2529 kPa (18969 mm Hg) [54.4 °C]
Vapor density	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	Not available. 3.04 [Air = 1] 3.43 [Air = 1]
Relative density	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	0.978 [Air = 1] Not available. 1.07 [Water = 1]
Solubility	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	Insoluble in the following materials: cold water and hot water. Not available. Not available.
Partition coefficient: n-octanol/water	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	Not available. 1.18 1.48
Auto-ignition temperature	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	490°C (914°F) >1100°C (>2012°F) >750°C (>1382°F)
Decomposition temperature	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	Not available. Not available. Not available.
Viscosity	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	Not available. Not available. Not available.
Physical/chemical properties comments	: R1150 ETHYLENE: Gas density: 1.261 kg/m ³ (0°C)	

Section 10. Stability and reactivity

10.1 Reactivity	:  1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients. No specific test data related to reactivity available for this product or its ingredients.
10.2 Chemical stability	:  1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	The product is stable. The product is stable. The product is stable.
10.3 Possibility of hazardous reactions	:  1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur. Under normal conditions of storage and use, hazardous reactions will not occur.
10.4 Conditions to avoid	:  1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow gas to accumulate in low or confined areas. Do not allow gas to accumulate in low or confined areas. Do not allow gas to accumulate in low or confined areas.
10.5 Incompatible materials	:  1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	May react or be incompatible with oxidizing materials. metals, Al (powder), Zn, Be May react or be incompatible with oxidizing materials.
10.6 Hazardous decomposition products	:  1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced. Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Not available.

Irritation/Corrosion

Not available.

Sensitization

Section 11. Toxicological information

Not available.

Mutagenicity

Conclusion/Summary : Not available.

Carcinogenicity

Conclusion/Summary : Not available.

Classification

Product/ingredient name	OSHA	IARC	NTP
R1150 ETHYLENE Ethylene	-	3	-

Reproductive toxicity

Conclusion/Summary : Not available.

Teratogenicity

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
R1150 ETHYLENE Ethylene	Category 3	Not applicable.	Narcotic effects


Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Not available.

Information on the likely routes of exposure


:  R1150 ETHYLENE
Halocarbon R-14
(Tetrafluoromethane)
Genetron AZ-50 (R-507)

Routes of entry anticipated: Inhalation.
Routes of entry anticipated: Inhalation.

Routes of entry anticipated: Inhalation.

Potential acute health effects

Eye contact


:  R1150 ETHYLENE

Halocarbon R-14
(Tetrafluoromethane)
Genetron AZ-50 (R-507)

Contact with rapidly expanding gas may cause burns or frostbite.
Liquid can cause burns similar to frostbite.

Contact with rapidly expanding gas may cause burns or frostbite.

Inhalation

:  R1150 ETHYLENE

Halocarbon R-14
(Tetrafluoromethane)

Genetron AZ-50 (R-507)

Can cause central nervous system (CNS) depression. May cause drowsiness or dizziness.
At very high concentrations, can displace the normal air and cause suffocation from lack of oxygen.
At very high concentrations, can displace the normal air and cause suffocation from lack of oxygen.
At very high concentrations, can displace the normal air and cause suffocation from lack of oxygen.

Section 11. Toxicological information

Skin contact	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	Contact with rapidly expanding gas may cause burns or frostbite. Dermal contact with rapidly evaporating liquid could result in freezing of the tissues or frostbite. Contact with rapidly expanding gas may cause burns or frostbite.
Ingestion	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	Can cause central nervous system (CNS) depression. As this product is a gas, refer to the inhalation section. Ingestion of liquid can cause burns similar to frostbite. As this product is a gas, refer to the inhalation section.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	No specific data. Adverse symptoms may include the following: frostbite No specific data.
Inhalation	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	Adverse symptoms may include the following: nausea or vomiting headache drowsiness/fatigue dizziness/vertigo unconsciousness No specific data.
Skin contact	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	No specific data. No specific data. Adverse symptoms may include the following: frostbite No specific data.
Ingestion	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	No specific data. No specific data. Adverse symptoms may include the following: frostbite No specific data.

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

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

General	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.
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Section 11. Toxicological information

Carcinogenicity	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	No known significant effects or critical hazards. No known significant effects or critical hazards.
Mutagenicity	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	No known significant effects or critical hazards. No known significant effects or critical hazards.
Teratogenicity	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	No known significant effects or critical hazards. No known significant effects or critical hazards.
Developmental effects	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	No known significant effects or critical hazards. No known significant effects or critical hazards.
Fertility effects	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	No known significant effects or critical hazards. No known significant effects or critical hazards. No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Other information	: R1150 ETHYLENE Halocarbon R-14 (Tetrafluoromethane) Genetron AZ-50 (R-507)	Not available. Not available. Adverse symptoms may include the following: heartbeat irregularity (arrhythmia).
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Section 12. Ecological information

12.1 Toxicity

Not available.

12.2 Persistence and degradability

Not available.

12.3 Bioaccumulative potential

Product/ingredient name	LogP _{ow}	BCF	Potential
R1150 ETHYLENE Ethylene	1.13	-	low
Halocarbon R-14 (Tetrafluoromethane) carbon tetrafluoride	1.18	-	low
Genetron AZ-50 (R-507) Genetron AZ-50 (R-507)	1.48	-	low

Section 12. Ecological information

12.4 Mobility in soil

Soil/water partition coefficient (K_{oc}) : Not available.

12.5 Other adverse effects : This product has the potential to cause adverse ozone depletion effects.

Section 13. Disposal considerations

13.1 Waste treatment methods

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.






Disposal should be in accordance with applicable regional, national and local laws and regulations. Local regulations may be more stringent than regional or national requirements.

The information presented below only applies to the material as supplied. The identification based on characteristic(s) or listing may not apply if the material has been used or otherwise contaminated. It is the responsibility of the waste generator to determine the toxicity and physical properties of the material generated to determine the proper waste identification and disposal methods in compliance with applicable regulations.

Refer to Section 7: HANDLING AND STORAGE and Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION for additional handling information and protection of employees.

Section 14. Transport information

This Safety Data Sheet is written based on the encapsulated substance or mixture in this article. Since the hazardous ingredient is encapsulated, the risk of exposure by inhalation, ingestion, skin contact and eyes contact is minimum.

	DOT Classification	TDG Classification	Mexico Classification	IMDG	IATA
UN number	UN3363	UN3363	UN3363	UN3363	UN3363
UN proper shipping name	Dangerous Goods in Apparatus	DANGEROUS GOODS IN APPARATUS	MERCANCIAS PELIGROSAS EN APARATOS	DANGEROUS GOODS IN APPARATUS	Dangerous goods in apparatus
Transport hazard class(es)	9 	9 	9 	9 	9 
Packing group	-	-	-	-	-
Environmental hazards	No.	No.	No.	No.	No.

Additional information

Section 14. Transport information

- DOT Classification** : **Limited quantity** No.
Packaging instruction Exceptions: None. Non-bulk: 222. Bulk: None.
Special provisions 136, A105
- TDG Classification** : **P**roduct classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.43-2.45 (Class 9).
Explosive Limit and Limited Quantity Index 0
Special provisions 167
- Mexico Classification** : **S**pecial provisions 301
- IMDG** : **E**mergency schedules F-A, _S-P_
Special provisions 301
- IATA** : **Q**uantity limitation Passenger and Cargo Aircraft: Packaging instructions: See 962. Cargo Aircraft Only: Packaging instructions: See 962. Limited Quantities - Passenger Aircraft: Forbidden. Packaging instructions: Forbidden.
Special provisions A48, A107
- Special precautions for user** : **Transport within user's premises:** always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.
- Transport in bulk according to Annex II of MARPOL and the IBC Code** : Not available.

Section 15. Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

- U.S. Federal regulations** : **TSCA 8(a) CDR Exempt/Partial exemption:** Not determined
Clean Air Act (CAA) 112 regulated flammable substances: Ethylene
- Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs)** : Not listed
- Clean Air Act Section 602 Class I Substances** : Not listed
- Clean Air Act Section 602 Class II Substances** : Not listed
- DEA List I Chemicals (Precursor Chemicals)** : Not listed
- DEA List II Chemicals (Essential Chemicals)** : Not listed
- SARA 302/304**
Composition/information on ingredients
 No products were found.
- SARA 304 RQ** : Not applicable.
- SARA 311/312**

Section 15. Regulatory information

Classification	: R1150 ETHYLENE	FLAMMABLE GASES - Category 1 GASES UNDER PRESSURE - Compressed gas SIMPLE ASPHYXIANTS SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3 GASES UNDER PRESSURE - Liquefied gas
	Halocarbon R-14 (Tetrafluoromethane)	
	Genetron AZ-50 (R-507)	SIMPLE ASPHYXIANTS GASES UNDER PRESSURE - Compressed gas SIMPLE ASPHYXIANTS

Composition/information on ingredients

Name	%	Classification
R1150 ETHYLENE Ethylene	100	FLAMMABLE GASES - Category 1 GASES UNDER PRESSURE - Compressed gas SIMPLE ASPHYXIANTS SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3
Halocarbon R-14 (Tetrafluoromethane) carbon tetrafluoride	100	GASES UNDER PRESSURE - Liquefied gas SIMPLE ASPHYXIANTS
Genetron AZ-50 (R-507) pentafluoroethane	≥50 - ≤75	GASES UNDER PRESSURE - Compressed gas SIMPLE ASPHYXIANTS
1,1,1-trifluoroethane	≥50 - ≤75	FLAMMABLE GASES - Category 1 GASES UNDER PRESSURE - Compressed gas SIMPLE ASPHYXIANTS

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	R1150 ETHYLENE Ethylene	74-85-1	100
Supplier notification	R1150 ETHYLENE Ethylene	74-85-1	100

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts	: The following components are listed: ETHYLENE; ETHENE
New York	: None of the components are listed.
New Jersey	: The following components are listed: ETHYLENE; ETHENE; TETRAFLUOROMETHANE; CARBON TETRAFLUORIDE; FLUORIDES; FLUORIDES
Pennsylvania	: The following components are listed: ETHENE

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Rotterdam Convention on Prior Informed Consent (PIC)

Section 15. Regulatory information

Not listed.

[UNECE Aarhus Protocol on POPs and Heavy Metals](#)

Not listed.

[Inventory list](#)

Australia	: All components are listed or exempted.
Canada	: All components are listed or exempted.
China	: All components are listed or exempted.
Europe	: All components are listed or exempted.
Japan	: Japan inventory (ENCS) : All components are listed or exempted. Japan inventory (ISHL) : All components are listed or exempted.
Malaysia	: <input checked="" type="checkbox"/> All components are listed or exempted.
New Zealand	: All components are listed or exempted.
Philippines	: All components are listed or exempted.
Republic of Korea	: All components are listed or exempted.
Taiwan	: All components are listed or exempted.
Thailand	: <input checked="" type="checkbox"/> Not determined.
Turkey	: Not determined.
United States	: All components are listed or exempted.
Viet Nam	: <input checked="" type="checkbox"/> Not determined.

Section 16. Other information

[History](#)

Date of issue	: 02/26/2018
Date of previous issue	: 04/13/2016
Version	: 3

[Procedure used to derive the classification](#)

Classification	Justification
<input checked="" type="checkbox"/> R1150 ETHYLENE FLAMMABLE GASES - Category 1 GASES UNDER PRESSURE - Compressed gas SIMPLE ASPHYXIANTS SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) - Category 3	On basis of test data On basis of test data Expert judgment Calculation method
Halocarbon R-14 (Tetrafluoromethane) GASES UNDER PRESSURE - Liquefied gas SIMPLE ASPHYXIANTS	On basis of test data Expert judgment
Genetron AZ-50 (R-507) GASES UNDER PRESSURE - Compressed gas SIMPLE ASPHYXIANTS	On basis of test data Expert judgment

Indicates information that has changed from previously issued version.

[Notice to reader](#)

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