

1,1,2,2-Tetrachloroethane**185434-1L**

Version 1.1

Revision Date 08/20/2018

Print Date 08/01/2019

SECTION 1. IDENTIFICATION

Product name : 1,1,2,2-Tetrachloroethane

Number : 000000020734

Product Use Description : Laboratory chemicals

Manufacturer or supplier's details : Honeywell International Inc.
1953 South Harvey Street
Muskegon, MI 49442

For more information call : 1-800-368-0050
+1-231-726-3171

(Monday-Friday, 9:00am-5:00pm)

In case of emergency call : Medical: 1-800-498-5701 or +1-303-389-1414
: **Transportation (CHEMTREC): 1-800-424-9300 or**
: **+1-703-527-3887**
:
: (24 hours/day, 7 days/week)

SECTION 2. HAZARDS IDENTIFICATION**Emergency Overview**

Form : liquid

Color : colourless

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Classification of the substance or mixture

Classification of the substance or mixture : Acute toxicity, Category 2, Inhalation
Acute toxicity, Category 1, Dermal
Carcinogenicity, Category 2

GHS Label elements, including precautionary statements

Symbol(s)



Signal word

: Danger

Hazard statements

: Fatal in contact with skin or if inhaled
Suspected of causing cancer.

Precautionary statements

Prevention:
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
Do not get in eyes, on skin, or on clothing.
Wash skin thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Wear protective gloves/protective clothing/eye protection/face protection.
Wear respiratory protection.

Response:

IF ON SKIN: Gently wash with plenty of soap and water.
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
Immediately call a POISON CENTER/doctor.
Remove/Take off immediately all contaminated clothing.
Wash contaminated clothing before reuse.

Storage:

Store in a well-ventilated place. Keep container tightly closed.

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Store locked up.

Disposal:

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

Carcinogenicity

IARC: 1,1,2,2-Tetrachloroethane 79-34-5
 Group 2B: Possibly carcinogenic to humans

ACGIH: 1,1,2,2-Tetrachloroethane 79-34-5
 A3: Confirmed animal carcinogen

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Formula : C₂H₂Cl₄

Chemical nature : Substance

Chemical name	CAS-No.	Concentration
1,1,2,2-Tetrachloroethane	79-34-5	100.00 %

SECTION 4. FIRST AID MEASURES

General advice : First aider needs to protect himself. Move out of dangerous area. Take off all contaminated clothing immediately.

Inhalation : Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. Call a physician immediately.

Skin contact : After contact with skin, wash immediately with plenty of water. Take off contaminated clothing and shoes immediately. Wash

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- contaminated clothing before re-use. Call a physician immediately.
- Eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Call a physician immediately.
- Ingestion : Rinse mouth with water. Do NOT induce vomiting. Call a physician immediately.

SECTION 5. FIREFIGHTING MEASURES

- Suitable extinguishing media : Dry powder
Water spray jet
Foam
Carbon dioxide (CO₂)
- Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.
- Specific hazards during firefighting : Not combustible.
Vapours are heavier than air and may spread along floors.
Fire may cause evolution of:
Chlorine compounds
Hydrogen chloride gas
Carbonyl halides
Carbon oxides
- Special protective equipment for firefighters : Wear full protective clothing and self-contained breathing apparatus.
- Further information : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

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Personal precautions, protective equipment and emergency procedures : Wear personal protective equipment. Unprotected persons must be kept away.
Evacuate personnel to safe areas.
Ensure adequate ventilation.

Environmental precautions : Should not be released into the environment.
Do not flush into surface water or sanitary sewer system.

Methods and materials for containment and cleaning up : Soak up with inert absorbent material.
Sweep up and shovel into suitable containers for disposal.
Dispose of in accordance with local regulations.

SECTION 7. HANDLING AND STORAGE**Handling**

Precautions for safe handling : Wear personal protective equipment.
Use only in well-ventilated areas.
Do not breathe vapours or spray mist.
Do not get in eyes, on skin, or on clothing.

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Storage

Conditions for safe storage, including any incompatibilities : Store in original container.
Keep containers tightly closed in a dry, cool and well-ventilated place.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Protective measures : Ensure that eyewash stations and safety showers are close to the workstation location.
Legal requirements are to be considered in regard of the selection, use and care of personal protective equipment.
Avoid exposure - obtain special instructions before use.

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- Engineering measures : Use with local exhaust ventilation.
- Eye protection : Safety glasses with side-shields
- Hand protection : Impervious gloves
- Skin and body protection : Wear suitable protective equipment.
Wear as appropriate:
Impervious clothing
- Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.
Wear a positive-pressure supplied-air respirator with full facepiece.
- Hygiene measures : Take off all contaminated clothing immediately.
Remove and wash contaminated clothing before re-use.
Keep working clothes separately.
Wash hands before breaks and at the end of workday.
When using do not eat or drink.

Exposure Guidelines

Components	CAS-No.	Value	Control parameters	Update	Basis
1,1,2,2-Tetrachloroethane	79-34-5	TWA : Time weighted average	(1 ppm)	2008	ACGIH:US. ACGIH Threshold Limit Values
1,1,2,2-Tetrachloroethane	79-34-5	SKIN_DES : Skin designation:	Can be absorbed through the skin.	2008	ACGIH:US. ACGIH Threshold Limit Values
1,1,2,2-Tetrachloroethane	79-34-5	REL : Recommended exposure limit (REL):	7 mg/m3 (1 ppm)	2005	NIOSH/GUIDE:US. NIOSH: Pocket Guide to Chemical Hazards

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1,1,2,2-Tetrachloroethane	79-34-5	SKIN_DES : Skin designation:	Can be absorbed through the skin.	2005	NIOSH/GUIDE:US. NIOSH: Pocket Guide to Chemical Hazards
1,1,2,2-Tetrachloroethane	79-34-5	SKIN_DES : Skin designation:	Can be absorbed through the skin.	02 2006	OSHA_TRANS:US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)
1,1,2,2-Tetrachloroethane	79-34-5	PEL : Permissible exposure limit	35 mg/m3 (5 ppm)	02 2006	OSHA_TRANS:US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)
1,1,2,2-Tetrachloroethane	79-34-5	TWA : Time weighted average	7 mg/m3 (1 ppm)	1989	Z1A:US. OSHA Table Z-1-A (29 CFR 1910.1000)
1,1,2,2-Tetrachloroethane	79-34-5	SKIN_FINAL : Skin designation (Final Rule Limit applies):	Can be absorbed through the skin.	1989	Z1A:US. OSHA Table Z-1-A (29 CFR 1910.1000)

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state : liquid

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Color : colourless

Melting point/range : -43 °C

Boiling point/boiling range : 147 °C

Vapor pressure : 10.7 hPa
at 20 °C(68 °F)Density : 1.586 g/cm³ at 25 °CPartition coefficient:
n-octanol/water : log Pow: 5

Decomposition temperature : Note: No decomposition if used as directed.

Molecular weight : 167.85 g/mol

SECTION 10. STABILITY AND REACTIVITY

Chemical stability : Stable under normal conditions.

Possibility of hazardous
reactions : Hazardous polymerisation does not occur.

Conditions to avoid : Keep away from direct sunlight.

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Incompatible materials : Oxidizing agents
Powdered metals
Strong bases

Hazardous decomposition products : Carbonyl halides
Carbon oxides
Chlorine compounds
Hydrogen chloride

SECTION 11. TOXICOLOGICAL INFORMATION

Acute oral toxicity : Note: no data available

Acute inhalation toxicity : Note: Classification based on Annex VI of regulation 1272/2008/EC.

Acute dermal toxicity : Note: Classification based on Annex VI of regulation 1272/2008/EC.

Skin irritation : Note: no data available

Eye irritation : Note: no data available

Sensitisation : Note: no data available

Repeated dose toxicity : Note: no data available

Genotoxicity in vitro : Note: no data available

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CMR effects : Carcinogenicity: Sufficient evidence of carcinogenicity in animal experiments

Further information : Note: Confirmed animal carcinogen with unknown relevance to humans.

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity effects**

Toxicity to fish : Note: Classification based on Annex VI of regulation 1272/2008/EC.

Toxicity to daphnia and other aquatic invertebrates : Note: Classification based on Annex VI of regulation 1272/2008/EC.

Toxicity to algae : Note: Classification based on Annex VI of regulation 1272/2008/EC.

Further information on ecology**SECTION 13. DISPOSAL CONSIDERATIONS**

Disposal methods : Observe all Federal, State, and Local Environmental regulations.

SECTION 14. TRANSPORT INFORMATION

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DOT UN/ID No. : UN 1702
 Proper shipping name : 1,1,2,2-TETRACHLOROETHANE
 Class : 6.1
 Packing group : II
 Hazard Labels : 6.1

IATA UN/ID No. : UN 1702
 Description of the goods : 1,1,2,2-TETRACHLOROETHANE
 Class : 6.1
 Packaging group : II
 Hazard Labels : 6.1
 Packing instruction (cargo aircraft) : 661
 Packing instruction (passenger aircraft) : 654
 Packing instruction (passenger aircraft) : Y641

IMDG UN/ID No. : UN 1702
 Description of the goods : 1,1,2,2-TETRACHLOROETHANE
 Class : 6.1
 Packaging group : II
 Hazard Labels : 6.1
 EmS Number : F-A, S-A
 Marine pollutant : yes

SECTION 15. REGULATORY INFORMATION**Inventories**

US. Toxic Substances Control Act : On TSCA Inventory

Australia. Industrial Chemical (Notification and Assessment) Act : On the inventory, or in compliance with the inventory

Canada. Canadian : All components of this product are on the Canadian DSL

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Environmental Protection
Act (CEPA). Domestic
Substances List (DSL)

Japan. Kashin-Hou Law List : On the inventory, or in compliance with the inventory

Korea. Existing Chemicals
Inventory (KECI) : On the inventory, or in compliance with the inventory

Philippines. The Toxic
Substances and Hazardous
and Nuclear Waste Control
Act : On the inventory, or in compliance with the inventory

China. Inventory of Existing
Chemical Substances : On the inventory, or in compliance with the inventory

New Zealand. Inventory of
Chemicals (NZIoC), as
published by ERMA New
Zealand : On the inventory, or in compliance with the inventory

National 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 : The following components are subject to reporting levels established by SARA Title III, Section 313:
: 1,1,2,2-Tetrachloroethane 79-34-5

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

**CERCLA Reportable
Quantity** : 100 lbs

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California Prop. 65

:



WARNING: This product can expose you to chemicals, listed below, known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

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Massachusetts RTK

:

1,1,2,2-Tetrachloroethane

79-34-5

New Jersey RTK

:

1,1,2,2-Tetrachloroethane

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Pennsylvania RTK

:

1,1,2,2-Tetrachloroethane

79-34-5

SECTION 16. OTHER INFORMATION

	HMIS III	NFPA
Health hazard	: 2*	2
Flammability	: 0	0
Physical Hazard	: 0	
Instability	:	0

* - Chronic health hazard

Hazard rating and rating systems (e.g. HMIS® III, NFPA): This information is intended solely for the use of individuals trained in the particular system.

Further information

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. Final determination of suitability of any material is the sole responsibility of the user. This information should not constitute a guarantee for any specific product properties.

Changes since the last version are highlighted in the margin. This version replaces all previous

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versions.

Previous Issue Date: 10/07/2016

Prepared by Honeywell Performance Materials and Technologies Product Stewardship Group