

## Chloroform

25669-6X1L

Version 1.7

Revision Date 24.04.2023

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

#### 1.1. Product identifier

Product name : Chloroform  
SDS-number : 000000020534  
Type of product : Substance  
Remarks : SDS according to Art. 31 of Regulation (EC) 1907/2006.  
In accordance to the Article 14 (1) of the REACH Regulation  
(EC) No 1907/2006, exposure estimation and risk  
characterisation is not required.

Chemical name : trichloromethane; chloroform

Index-No. : 602-006-00-4

REACH Registration  
Number : no data available

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

Use of the  
Substance/Mixture : Laboratory chemicals

Uses advised against : none

#### 1.3. Details of the supplier of the safety data sheet

Company	: Honeywell International Inc. 115 Tabor Road 07950-2546 Morris Plains USA	Honeywell International, Inc. 115 Tabor Road Morris Plains, NJ 07950-2546 USA
---------	---	--

Telephone :  
For further information,  
please contact: : [SafetyDataSheet@Honeywell.com](mailto:SafetyDataSheet@Honeywell.com)

#### 1.4. Emergency telephone number

## Chloroform

25669-6X1L

Version 1.7

Revision Date 24.04.2023

Emergency telephone : +1-703-527-3887 (ChemTrec-Transport)  
number : +1-303-389-1414 (Medical)  
Country based Poison : see chapter 15.1  
Control Center

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### REGULATION (EC) No 1272/2008

Acute toxicity Category 4 - Oral  
H302 Harmful if swallowed.  
Acute toxicity Category 3 - Inhalation  
H331 Toxic if inhaled.  
Skin irritation Category 2  
H315 Causes skin irritation.  
Eye irritation Category 2  
H319 Causes serious eye irritation.  
Carcinogenicity Category 2  
H351 Suspected of causing cancer.  
Reproductive toxicity Category 2  
H361d Suspected of damaging the unborn child.  
Specific target organ toxicity - single exposure Category 3 - Central nervous system  
H336 May cause drowsiness or dizziness.  
Specific target organ toxicity - repeated exposure Category 1  
H372 Causes damage to organs through prolonged or repeated exposure if swallowed and inhaled.

#### 2.2. Label elements

##### REGULATION (EC) No 1272/2008

Hazard pictograms : 

Signal word : Danger

Hazard statements : H302 Harmful if swallowed.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.  
H331 Toxic if inhaled.  
H336 May cause drowsiness or dizziness.  
H351 Suspected of causing cancer.

## Chloroform

25669-6X1L

Version 1.7

Revision Date 24.04.2023

	H361d	Suspected of damaging the unborn child.
	H372	Causes damage to organs through prolonged or repeated exposure if swallowed and inhaled.
Precautionary statements	: P260	Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P284	In case of inadequate ventilation wear respiratory protection.
	P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
	P302 + P352	IF ON SKIN: Wash with plenty of water.
	P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
	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.

### 2.3. Other hazards

High concentration of vapours may induce unconsciousness. Repeated or prolonged exposure to the substance can produce liver damage. This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

## SECTION 3: Composition/information on ingredients

### 3.1. Substance

Chemical name	CAS-No. Index-No. REACH Registration Number	Classification 1272/2008	Concentration	Remarks

## Chloroform

25669-6X1L

Version 1.7

Revision Date 24.04.2023

	EC-No.			
trichloromethane; chloroform	67-66-3 602-006-00-4 200-663-8	Acute Tox. 4; H302; Oral Acute Tox. 3; H331; Inhalation Skin Irrit. 2; H315 Eye Irrit. 2; H319 Carc. 2; H351 Repr. 2; H361d STOT RE 1; H372 STOT SE 3; H336	>= 90 % - <= 100 %	

### 3.2. Mixture

Not applicable

Occupational Exposure Limit(s), if available, are listed in Section 8.

For the full text of the H-Statements mentioned in this Section, see Section 16.

## SECTION 4: First aid measures

### 4.1 Description of first aid measures

*General advice:*

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

*Inhalation:*

If inhaled, remove to fresh air. Keep patient warm and at rest. Call a physician.

*Skin contact:*

After contact with skin, wash immediately with plenty of water. Call a physician if irritation develops or persists.

*Eye contact:*

Protect unharmed eye. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

*Ingestion:*

Rinse mouth with water. When swallowed, allow water to be drunk. Do NOT induce vomiting. Call a physician immediately.

### 4.2. Most important symptoms and effects, both acute and delayed

No data available

## Chloroform

25669-6X1L

Version 1.7

Revision Date 24.04.2023

### 4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

See Section 11 for more detailed information on health effects and symptoms.

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

*Suitable extinguishing media:*

Water spray  
Foam  
Carbon dioxide (CO<sub>2</sub>)  
Dry powder

*Extinguishing media which shall not be used for safety reasons:*

High volume water jet

### 5.2. Special hazards arising from the substance or mixture

Fire may cause evolution of:

Carbon oxides  
Phosgene  
Hydrogen chloride gas

### 5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.  
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Evacuate personnel to safe areas. Wear personal protective equipment. Unprotected persons must be kept away.

### 6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system. Do not allow run-off from fire fighting to enter drains or water courses.

## Chloroform

25669-6X1L

Version 1.7

Revision Date 24.04.2023

---

### 6.3. Methods and materials for containment and cleaning up

Soak up with inert absorbent material.  
Pick for disposal in tightly closed containers

### 6.4. Reference to other sections

For personal protection see section 8.

---

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

*Advice on safe handling:*

Wear personal protective equipment. Use only with adequate ventilation.

*Advice on protection against fire and explosion:*

Normal measures for preventive fire protection.

*Hygiene measures:*

Keep working clothes separately. Take off all contaminated clothing immediately. Avoid contact with skin, eyes and clothing. Wash hands before breaks and at the end of workday.

### 7.2. Conditions for safe storage, including any incompatibilities

*Requirements for storage areas and containers:*

Keep only in the original container, tightly closed, in a well ventilated place. Store at room temperature. (Ambient temperature: > 0 < 35°C) Protect from atmospheric moisture and water.

### 7.3. Specific end use(s)

no additional data available

## Chloroform

25669-6X1L

Version 1.7

Revision Date 24.04.2023

### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

##### Occupational exposure limits:

Components	Basis / Value type	Value / Form of exposure	Exceeding Factor	Remarks
trichloromethane; chloroform	EH40 WEL TWA	9,9 mg/m <sup>3</sup> 2 ppm		
trichloromethane; chloroform	EH40 WEL SKIN_DES			Can be absorbed through the skin.
trichloromethane; chloroform	EH40 WEL			Listed
trichloromethane; chloroform	EU ELV SKIN_DES			Can be absorbed through the skin.
trichloromethane; chloroform	EU ELV TWA	10 mg/m <sup>3</sup> 2 ppm		Indicative

TWA - Time weighted average

SKIN\_DES - Skin designation:

##### DNEL/ PNEC-Values

Component	End-use/impact	Exposure duration	Value	Exposure routes	Remarks
trichloromethane; chloroform	Workers / Long-term systemic effects		2,5 mg/m <sup>3</sup>	Inhalation	
trichloromethane; chloroform	Workers / Acute systemic effects		333 mg/m <sup>3</sup>	Inhalation	
trichloromethane; chloroform	Workers / Long-term local effects		2,5 mg/m <sup>3</sup>	Inhalation	
trichloromethane; chloroform	Workers / Long-term systemic effects		0,94mg/kg bw/d	Skin contact	
trichloromethane;	Consumers /		0,18 mg/m <sup>3</sup>	Inhalation	

## Chloroform

25669-6X1L

Version 1.7

Revision Date 24.04.2023

chloroform	Long-term systemic effects				
------------	----------------------------	--	--	--	--

Component	Environmental compartment / Value	Remarks
trichloromethane; chloroform	Fresh water: 0,146 mg/l	Assessment factor: 10
trichloromethane; chloroform	Marine water: 0,015 mg/l	Assessment factor: 100
trichloromethane; chloroform	Sewage treatment plant: 0,048 mg/l	Assessment factor: 10
trichloromethane; chloroform	Fresh water sediment: 0,45 mg/kg dw	Assessment factor: 10
trichloromethane; chloroform	Marine sediment: 0,09 mg/kg dw	Assessment factor: 50
trichloromethane; chloroform	Soil: 0,56 mg/kg dw	

### 8.2. Exposure controls

#### Occupational exposure controls

Do not breathe vapours or spray mist.

The Personal Protective Equipment must be in accordance with EN standards:respirator EN 136, 140, 149; safety glasses EN 166; protective suit: EN 340, 463, 468, 943-1, 943-2; gloves EN 374, 511; safety shoes EN-ISO 20345.

#### Engineering measures

Use with local exhaust ventilation.

#### Personal protective equipment

*Respiratory protection:*

Recommended Filter type:

In the case of vapour formation use a respirator with an approved filter.

Organic gas and low boiling vapour type

Equipment should conform to EN 14387

*Hand protection:*

Glove material: Viton®



## Chloroform

25669-6X1L

Version 1.7

Revision Date 24.04.2023

Break through time: > 480 min

Glove thickness: 0,7 mm

Vitoject® 890

Gloves must be inspected prior to use.

Replace when worn.

Remarks:Supplementary note: The specifications are based on information and tests from similar substances by analogy.

Due to varying conditions ( e.g.temperature or other strains) it must be considered that the usage of a chemical protective glove in practice may be much shorter than the permeation time determined in accordance with EN 374.

Since actual conditions of practical use often deviate from standardised conditions according EN 374 the glove manufacturer recommends to use the chemical protective glove in practice not longer than 50% of the recommended permeation time.

Manufacturer's directions for use should be observed because of great diversity of types .

Suitable gloves tested according EN 374 are supplied e.g. from KCL GmbH, D-36124 Eichenzell, Vertrieb@kcl.de

### *Eye protection:*

Safety goggles

### *Skin and body protection:*

Protective suit

Wear suitable protective equipment.

### **Environmental exposure controls**

Handle in accordance with local environmental regulations and good industrial practices.

## **SECTION 9: Physical and chemical properties**

### **9.1. Information on basic physical and chemical properties**

Physical state	:	liquid
Colour	:	colourless
Odour	:	sweet
Melting point/range	:	-63 °C
Boiling point/boiling range	:	60 - 62 °C at 1.013 hPa

## Chloroform

25669-6X1L

Version 1.7

Revision Date 24.04.2023

Upper explosion limit	:	Not applicable
Lower explosion limit	:	Not applicable
Flash point	:	Not applicable
Auto-ignition temperature	:	>650 °C
Decomposition temperature	:	At normal pressure may be distilled without decomposition.
pH	:	No data available
Viscosity, kinematic	:	No data available
Water solubility	:	0,8 g/l at 20 °C
Solubility in other solvents	:	Soluble in most organic solvents
Partition coefficient: n-octanol/water	:	log Pow 1,97
Vapour pressure	:	210 hPa at 20 °C
Density	:	1,48 g/cm <sup>3</sup> at 20 °C
Relative vapour density	:	No data available

### 9.2 Other Information

The product is not flammable.

Evaporation rate : No data available

Viscosity, dynamic : No data available

## Chloroform

25669-6X1L

Version 1.7

Revision Date 24.04.2023

---

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Stable under recommended storage conditions.

#### 10.2. Chemical stability

At normal pressure may be distilled without decomposition.

#### 10.3. Possibility of hazardous reactions

Hazardous polymerisation does not occur.

#### 10.4. Conditions to avoid

No data available

#### 10.5. Incompatible materials

Plastic materials can be attacked.  
Strong oxidizing agents  
Reactions with metals in powder form.  
Alkali metals  
Alkaline earth metals  
Strong bases

#### 10.6. Hazardous decomposition products

In case of fire hazardous decomposition products may be produced such as:  
Carbon oxides  
Phosgene  
Hydrogen chloride gas

---

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

*Acute oral toxicity:*  
LD50  
Species: Rat  
Sex: male  
Value: 908 mg/kg

## Chloroform

25669-6X1L

Version 1.7

Revision Date 24.04.2023

### LD50

Species: Rat

Sex: female

Value: 1.117 mg/kg

### *Acute dermal toxicity:*

No data available

### *Acute inhalation toxicity:*

No data available

### Acute toxicity estimate

Value: 3,03 mg/l

Exposure time: 4 h

Method: Calculation method

### *Skin irritation:*

Species: Rabbit

Classification: irritating

Exposure time: 24 h

### *Eye irritation:*

Species: Rabbit

Classification: irritating

### *Respiratory or skin sensitisation:*

Species: Guinea pig

Method: OECD Test Guideline 406

non-sensitizing

Method: OECD 429

non-sensitizing

### *Repeated dose toxicity:*

Species: Rat

Exposure time: 28 d

NOAEL 34 mg/kg

### *Germ cell mutagenicity:*

Test Method: Ames test

Result: negative

## Chloroform

25669-6X1L

Version 1.7

Revision Date 24.04.2023

Test Method: In vivo micronucleus test  
Method: OECD Test Guideline 474  
Result: negative

Test Method: Unscheduled DNA synthesis  
Method: OECD Test Guideline 486  
Result: negative

*Aspiration hazard:*  
No data available

### 11.2. Information on other hazards

Endocrine disrupting properties  
No data available

*Other information:*  
Solvent removes skin oil from the skin.  
Solvent vapours have a narcotic effect if inhaled in high concentrations.  
Possible risk of harm to the unborn child.  
May cause cancer.

## SECTION 12: Ecological information

### 12.1. Toxicity

*Toxicity to fish:*  
LC50  
Species: Oncorhynchus mykiss (rainbow trout)  
Value: 18 mg/l  
Exposure time: 96 h

*Toxicity to aquatic plants:*  
ErC50  
static test  
Species: Algae  
Value: 13,3 mg/l  
Exposure time: 72 h

*Toxicity to Microorganisms:*  
EC50

## Chloroform

25669-6X1L

Version 1.7

Revision Date 24.04.2023

---

Species: Nitrosomonas sp  
Value: 0,48 mg/l

*Toxicity to aquatic invertebrates:*

EC50

Species: Crassostrea gigas

Value: 152,5 mg/l

Exposure time: 48 h

### 12.2. Persistence and degradability

*Biodegradability:*

Result: Not readily biodegradable.

### 12.3. Bioaccumulative potential

No data available

### 12.4. Mobility in soil

No data available

### 12.5. Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

### 12.6. Endocrine disrupting properties

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

### 12.7. Other adverse effects

Do not flush into surface water or sanitary sewer system.

---

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

*Product:*

Dispose according to legal requirements.

## Chloroform

25669-6X1L

Version 1.7

Revision Date 24.04.2023

*Packaging:*

Legal requirements are to be considered in regard of reuse or disposal of used packaging materials

*Further information:*

Provisions relating to waste:  
EC Directive 2006/12/EC; 2008/98/EEC  
Regulation No. 1013/2006

For personal protection see section 8.

### SECTION 14: Transport information

**14.1 UN number**

ADR/RID:1888

IMDG:1888

IATA:1888

**14.2 UN proper shipping name**

ADR/RID:CHLOROFORM

IMDG:CHLOROFORM

IATA:Chloroform

**14.3 Transport hazard class(es)**

ADR/RID: 6.1

IMDG: 6.1

IATA: 6.1

**14.4 Packaging group**

ADR/RID: III

IMDG: III

IATA: III

**14.5 Environmental hazards**

ADR/RID:no

Marine pollutant: no

**14.6 Special precautions for user**

No data available

**14.7 Maritime transport in bulk according to IMO instruments**

No data available

### SECTION 15: Regulatory information

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

Basis	Value	Remarks
Regulation (EC) No. 1907/2006, Annex XVII		This product contains an ingredient according to Annex XVII of the REACH Regulation1907/2006/EC.

**Chloroform**

25669-6X1L

Version 1.7

Revision Date 24.04.2023

Directive 2012/18/EC Listed in Regulation : H2: ACUTE TOXIC	<b>Quantity:</b> 50.000 kg <b>Quantity:</b> 200.000 kg	
Substances of very high concern (SVHC)		This product does not contain substances of very high concern according to Regulation (EC) No Article 57 above the respective regulatory 1907/2006 (REACH), concentration limit of $\geq 0.1$ % (w/w).

**Poison Control Center**

Country	Phone Number
Austria	+4314064343
Belgium	070 245245
Bulgaria	(+35929154233
Croatia	(+3851)23-48-342
Cyprus	+357 2240 5611
Czech Republic	+420224919293; +420224915402
Denmark	82121212
Estonia	16662; (+372)6269390
Finland	9471977
France	+33(0)145425959
Greece	+30 210 779 3777
Hungary	(+36-80)201-199
Iceland	5432222
Ireland	+353(1)8092166
Italy	0382 24444
Germany	Berlin : 030/19240
	Bonn : 0228/19240
	Erfurt : 0361/730730

Country	Phone Number
Liechtenstein	+41 442515151
Lithuania	+370532362052
Luxembourg	070245245; (+352)80002-5500
Malta	+356 2395 2000
Netherlands	030-2748888
Norway	22591300
Poland	+48 42 25 38 400
Portugal	800250250
Romania	+40 21 318 3606
Slovakia (NTIC)	+421 2 54 774 166
Slovenia	+386 1 400 6051
Spain	+34915620420
Sweden	112 (begär Giftninformation);+46104566786
Switzerland	145
United Kingdom	(+44) 844 892 0111



## Chloroform

25669-6X1L

Version 1.7

Revision Date 24.04.2023

	Freiburg : 0761/19240
	Göttingen : 0551/19240
	Homburg : 06841/19240
	Mainz : 06131/19240
	Munich : 089/19240
Latvia	+37167042473

### Other inventory information

US. Toxic Substances Control Act  
On TSCA Inventory

Australia. Inventory of Industrial Chemicals (AIIC), as amended  
On the inventory, or in compliance with the inventory

Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL)  
All components of this product are on the Canadian 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. Inventory of Chemicals and Chemical Substances (PICCS)  
On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances (IECSC)  
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

Taiwan Chemical Substance Inventory (TCSI)  
On the inventory, or in compliance with the inventory

### 15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

## Chloroform

25669-6X1L

Version 1.7

Revision Date 24.04.2023

### SECTION 16: Other information

#### Text of H-statements referred to under heading 3

trichloromethane; chloroform	:	H302	Harmful if swallowed.
		H331	Toxic if inhaled.
		H315	Causes skin irritation.
		H319	Causes serious eye irritation.
		H351	Suspected of causing cancer.
		H361d	Suspected of damaging the unborn child.
		H372	Causes damage to organs through prolonged or repeated exposure if swallowed and inhaled.
		H336	May cause drowsiness or dizziness.
ethanol; ethyl alcohol (Stabilizer)	:	H225	Highly flammable liquid and vapour.
		H319	Causes serious eye irritation.

#### Further information

All directives and regulations refer to amended versions.  
Vertical lines in the left hand margin indicate a relevant amendment from the previous version.

#### Abbreviations:

EC European Community  
CAS Chemical Abstracts Service  
DNEL Derived no effect level  
PNEC Predicted no effect level  
vPvB Very persistent and very bioaccumulative substance  
PBT Persistent, bioaccumulative und toxic substance

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

**Chloroform**

25669-6X1L

Version 1.7

Revision Date 24.04.2023

---

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.

---