

Creation Date Oct-2013 Revision Date Oct-2018 Revision Number 2

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identification

Product Description: <u>Trichloroethylene, stabilized</u>

Product Grade: SQ. ER

Cat No.: Q28457, Q14715, Q1471c, Q28455, Q2845C, Q2845H, Q41957

Synonyms Triclene; Trichloroethene; Ethylene trichloride

 CAS-No
 79-01-6

 EC-No.
 201-167-4

 Molecular Formula
 C2 H Cl3

Reach Registration Number 01-2119490731-36

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

Recommended Use Laboratory chemicals. Scientific research and development. REACH (1907/2006) - Annex

XIV. The substance is used under strictly controlled conditions.

Sector of use SU3 - Industrial uses: Uses of substances as such or in preparations at industrial sites

Product category PC21 - Laboratory chemicals

Process categories PROC15 - Use as a laboratory reagent

Environmental release category ERC6a - Industrial use resulting in manufacture of another substance (use of intermediates)

Uses advised against All other uses

1.3. Details of the supplier of the safety data sheet

Company Thermo Fisher Scientific India Pvt. Ltd

403-404, B-wing, Delphi, Hiranandani Business Park,

Powai, Mumbai 400076, INDIA.

E-mail address <u>laboratorysolutions@thermofisher.com</u>

1.4. Emergency telephone number

India Toll Free: 18 00 22 22 30 Chemtrec US: (800)424-9300 Chemtrec EU: 001(202)483-7616

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

CLP Classification - Regulation (EC) No 1272/2008

Physical hazards

Based on available data, the classification criteria are not met

Health hazards

Skin Corrosion/irritation
Serious Eye Damage/Eye Irritation
Skin Sensitization
Category 2 (H319)
Skin Sensitization
Cerm Cell Mutagenicity
Carcinogenicity
Carcinogenicity
Specific target organ toxicity - (single exposure)

Category 2 (H317)
Category 1 (H317)
Category 2 (H341)
Category 1 (H350)
Category 1 (H350)
Category 3 (H336)

Environmental hazards

Trichloroethylene, stabilized

Chronic aquatic toxicity Category 3 (H412)

2.2. Label elements



Signal Word Danger

Hazard Statements

- H315 Causes skin irritation
- H317 May cause an allergic skin reaction
- H319 Causes serious eye irritation
- H336 May cause drowsiness or dizziness
- H341 Suspected of causing genetic defects
- H350 May cause cancer
- H412 Harmful to aquatic life with long lasting effects

Precautionary Statements

- P302 + P352 IF ON SKIN: Wash with plenty of soap and water
- P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention
- P337 + P313 If eye irritation persists: Get medical advice/ attention
- P304 + P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing
- P312 Call a POISON CENTER or doctor/ physician if you feel unwell
- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection

Additional EU labelling

Restricted to professional users

2.3. Other hazards

Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB) No information available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Component	CAS-No	EC-No.	Weight %	CLP Classification - Regulation (EC) No 1272/2008
Trichloroethylene	79-01-6	EEC No. 201-167-4	100	Skin Irrit. 2 (H315) Eye Irrit. 2 (H319) Skin Sens. 1 (H317) STOT SE 3 (H336) Muta. 2 (H341) Carc. 1B (H350) Aquatic Chronic 3 (H412)

Pooch Posistration Number	01-2119490731-36
Reach Registration Number	01-2119490731-30

Full text of Hazard Statements: see section 16

Revision Date Oct-2018

Trichloroethylene, stabilized

Revision Date Oct-2018

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General Advice Show this safety data sheet to the doctor in attendance. Immediate medical attention is

required.

Eve Contact Rinse immediately with plenty of water, also under the evelids, for at least 15 minutes. In

the case of contact with eyes, rinse immediately with plenty of water and seek medical

advice.

Skin Contact Wash off immediately with plenty of water for at least 15 minutes. Immediate medical

attention is required.

Ingestion Do not induce vomiting. Call a physician or Poison Control Center immediately.

Inhalation Move to fresh air. If not breathing, give artificial respiration. Do not use mouth-to-mouth

method if victim ingested or inhaled the substance; give artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.

Immediate medical attention is required.

Protection of First-aiders Ensure that medical personnel are aware of the material(s) involved, take precautions to

protect themselves and prevent spread of contamination.

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

None reasonably foreseeable. May cause allergic skin reaction. Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting: Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle

pain or flushing

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

Notes to Physician Treat symptomatically. Symptoms may be delayed.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

Extinguishing media which must not be used for safety reasons

No information available.

5.2. Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating gases and vapors. Containers may explode when heated. Keep product and empty container away from heat and sources of ignition.

Hazardous Combustion Products

Hydrogen chloride gas, Chlorine, Phosgene, Carbon monoxide (CO), Carbon dioxide (CO2).

5.3. Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Trichloroethylene, stabilized

Revision Date Oct-2018

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.

6.2. Environmental precautions

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

6.3. Methods and material for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

6.4. Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Use only under a chemical fume hood. Do not breathe vapors or spray mist. Do not ingest.

Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Do not eat, drink or smoke when using this product. Remove and wash contaminated clothing before re-use. Wash hands before breaks and at the end of workday.

7.2. Conditions for safe storage, including any incompatibilities

Keep containers tightly closed in a dry, cool and well-ventilated place. Protect from light. Do not store in aluminum containers.

7.3. Specific end use(s)

Use in laboratories

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Exposure limits

List source(s): **UK** - EH40/2005 Containing the workplace exposure limits (WELs) for use with the Control of Substances Hazardous to Health Regulations (COSHH) 2002 (as amended). Updated by September 2006 official press release and October 2007 Supplement. **IRE** - 2010 Code of Practice for the Safety, Health and Welfare at Work (Chemical Agents) Regulations 2001. Published by the Health and Safety Authority.

Component	European Union	The United Kingdom	France	Belgium	Spain
Trichloroethylene		STEL: 150 ppm 15 min	TWA / VME: 75 ppm (8	TWA: 10 ppm 8 uren	TWA / VLA-ED: 10 ppm
		STEL: 820 mg/m ³ 15	heures).	TWA: 55 mg/m ³ 8 uren	(8 horas)
		min	TWA / VME: 405 mg/m ³	STEL: 25 ppm 15	TWA / VLA-ED: 55
		TWA: 100 ppm 8 hr	(8 heures).	minuten	mg/m³ (8 horas)
		TWA: 550 mg/m ³ 8 hr	STEL / VLCT: 200 ppm.	STEL: 137 mg/m ³ 15	
		Carc.	STEL / VLCT: 1080	minuten	
		Skin	mg/m³.		

Component	Italy	Germany	Portugal	The Netherlands	Finland
Trichloroethylene		Haut	STEL: 100 ppm 15 minutos TWA: 50 ppm 8 horas		TWA: 10 ppm 8 tunteina TWA: 50 mg/m³ 8 tunteina Iho
					1110

Component Austria Denmark Switzerland Poland Norway	Austria i Dellillark i Switzerland i Poland i Norway	Component Austria	nent i Austria i Denmark		2 VV I L2				Poland	I INCIWAY
---	--	---------------------	--------------------------	--	-----------	--	--	--	--------	-----------

Trichloroethylene, stabilized

Revision Date Oct-2018

Trichloroethylene	TRK-KZW: 24 ppm 15 Minuten TRK-KZW: 132 mg/m³ 15 Minuten TRK-KZW: 2.4 ppm 15 Minuten TRK-KZW: 13.2 mg/m³ 15 Minuten TRK- TMW: 6 ppm TRK- TMW: 33 mg/m³ TRK-TMW: 0.6 ppm TRK-TMW: 3.3 mg/m³	TWA: 10 ppm 8 timer TWA: 55 mg/m ³ 8 timer	Haut/Peau STEL: 50 ppm 15 Minuten STEL: 273 mg/m³ 15 Minuten TWA: 20 ppm 8 Stunden TWA: 110 mg/m³ 8 Stunden	STEL: 100 mg/m³ 15 minutach TWA: 50 mg/m³ 8 godzinach	TWA: 10 ppm 8 timer TWA: 50 mg/m³ 8 timer STEL: 10 ppm 15 minutter. STEL: 50 mg/m³ 15 minutter.
-------------------	--	--	---	--	--

Component	Bulgaria	Croatia	Ireland	Cyprus	Czech Republic
Trichloroethylene	TWA: 135.0 mg/m³ STEL : 1000.0 mg/m³	kože TWA-GVI: 100 ppm 8 satima. TWA-GVI: 550 mg/m³ 8 satima. STEL-KGVI: 150 ppm 15 minutama. STEL- KGVI: 820 mg/m³ 15 minutama.	TWA: 10 ppm 8 hr. STEL: 25 ppm 15 min Skin		TWA: 250 mg/m³ 8 hodinách. Potential for cutaneous absorption Ceiling: 750 mg/m³

Component	Estonia	Gibraltar	Greece	Hungary	Iceland
Trichloroethylene	TWA: 10 ppm 8 tundides. TWA: 50 mg/m³ 8 tundides. STEL: 25 ppm 15 minutites. STEL: 140 mg/m³ 15 minutites.		STEL: 200 ppm STEL: 1080 mg/m³ TWA: 100 ppm TWA: 538 mg/m³	STEL: 540 mg/m³ 15 percekben. CK TWA: 270 mg/m³ 8 órában. AK	TWA: 10 ppm 8 klukkustundum. TWA: 55 mg/m³ 8 klukkustundum. Ceiling: 20 ppm Ceiling: 110 mg/m³

Component	Latvia	Lithuania	Luxembourg	Malta	Romania
Trichloroethylene	TWA: 10 mg/m ³	TWA: 10 ppm IPRD TWA: 50 mg/m³ IPRD STEL: 25 ppm STEL: 140 mg/m³			TWA: 18.5 ppm 8 ore TWA: 100 mg/m³ 8 ore STEL: 28 ppm 15 minute STEL: 150 mg/m³ 15 minute

Component	Russia	Slovak Republic	Slovenia	Sweden	Turkey
Trichloroethylene	TWA: 10 mg/m³ STEL: 30 mg/m³ vapor	TWA: 50 ppm 8 hodinách TWA: 275 mg/m³ 8 hodinách STEL: 250 ppm 15 minútach STEL: 1375 mg/m³ 15 minútach	TWA: 50 ppm 8 urah TWA: 270 mg/m³ 8 urah STEL: 200 ppm 15 minutah STEL: 1080 mg/m³ 15 minutah	STV: 25 ppm 15 minuter STV: 140 mg/m³ 15 minuter LLV: 10 ppm 8 timmar. LLV: 50 mg/m³ 8 timmar.	

Biological limit values List source(s):

Component	European Union	United Kingdom	France	Spain	Germany
Trichloroethylene			Free Trichloroethanol: 4	Trichloroacetic acid: 15	
			mg/L blood end of shift	mg/L urine end of	
			at end of workweek	workweek	
			Sum of Trichloroacetic	Trichloroethanol	
			acid and	(without hydrolysis): 0.5	
			Trichloroethanol: 300	mg/L blood end of	
			mg/g creatinine urine	workweek	
			end of shift at end of		
			workweek		
			Trichloroacetic acid: 100		
			mg/g creatinine urine		
			end of workweek		

Trichloroethylene, stabilized

Revision Date Oct-2018

Component	Italy	Finland	Denmark	Bulgaria	Romania
Trichloroethylene		Trichloroacetic acid: 120 μmol/L urine end of shift at end of workweek.			Trichloroacetic acid + Trichloroethanol: 300 mg/g Creatinine urine end of work week

Monitoring methods

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents.

MDHS70 General methods for sampling airborne gases and vapours

MDHS 88 Volatile organic compounds in air. Laboratory method using diffusive samplers, solvent desorption and gas chromatography

MDHS 96 Volatile organic compounds in air - Laboratory method using pumped solid sorbent tubes, solvent desorption and gas chromatography

Derived No Effect Level (DNEL) See table for values

Route of exposure	Acute effects (local)	Acute effects (systemic)	Chronic effects (local)	Chronic effects (systemic)
Oral				
Dermal				7.8 mg/kg bw/day
Inhalation	164.1 mg/m ³	164.1 mg/m ³		54.7 mg/m ³

Predicted No Effect Concentration See values below. (PNEC)

Fresh water 0.115 mg/l Fresh water sediment 2.04 mg/kg d.w. Marine water 0.0115 mg/l Marine water sediment 0.204 mg/kg d.w. Water

Intermittent 0.208 mg/l

Microorganisms in sewage

treatment

2.04 mg/kg d.w.

Soil (Agriculture) 0.344 mg/kg d.w.

8.2. Exposure controls

Engineering Measures

Use only under a chemical fume hood. Ensure adequate ventilation, especially in confined areas. Ensure that eyewash stations and safety showers are close to the workstation location.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

Personal protective equipment

Eye Protection Goggles (European standard - EN 166)

Hand Protection Protective gloves

- 1					
	Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
	Viton (R)	> 480 minutes	0.7 mm	EN 374	As tested under EN374-3 Determination of
	PVA	> 360 minutes	0.3 mm		Resistance to Permeation by Chemicals
	Nitrile rubber	< 12 minutes	0.7mm		•
	Laminated film (Barrier)	> 480 minutes	2.5 mil		

Skin and body protection Long sleeved clothing

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatability, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

Trichloroethylene, stabilized Revision Date Oct-2018

Respiratory Protection When workers are facing concentrations above the exposure limit they must use

appropriate certified respirators.

Large scale/emergency use Use a NIOSH/MSHA or European Standard EN 136 approved respirator if exposure limits

are exceeded or if irritation or other symptoms are experienced

Recommended Filter type: Organic gases and vapours filter Type A Brown conforming to

EN14387

Small scale/Laboratory use Maintain adequate ventilation Use a NIOSH/MSHA or European Standard EN 149:2001

approved respirator if exposure limits are exceeded or if irritation or other symptoms are

experienced.

Recommended half mask: - Valve filtering: EN405; or; Half mask: EN140; plus filter, EN

Literature reference

141

system.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance Colorless Physical State Liquid

Odor Characteristic
Odor Threshold No data available
pH No information available
Melting Point/Range -85 °C / -121 °F
Softening Point No data available
Boiling Point/Range 87 °C / 188.6 °F

Boiling Point/Range 87 °C / 188.6 °F Literature reference
Flash Point No information available Method - No information available

Evaporation Rate 0.69 (Carbon Tetrachloride = 1.0)

Flammability (solid,gas) Not applicable Liquid

Explosion Limits Lower 7.9 vol % Literature reference

Upper 44.8 vol % 77.3 mbar @ 20 °C

 Vapor Pressure
 77.3 mbar @ 20

 Vapor Density
 4.5 (Air = 1.0)

4.5 (All - 1.0)

Specific Gravity / Density 1.460

Bulk Density Not applicable Liquid

Water Solubility Slightly soluble 1.1g/l @ 20 °C

Solubility in other solvents No information available

Partition Coefficient (n-octanol/water)

Component log Pow Trichloroethylene 2.29

Autoignition Temperature 410 °C / 770 °F DIN 51794

Decomposition Temperature > 120°C

Viscosity 0.55 mPa.s (25°C) Based on available literature

Explosive Properties Not explosive explosive air/vapour mixtures possible

Oxidizing Properties Not oxidising

9.2. Other information

Molecular FormulaC2 H Cl3Molecular Weight131.39

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

None known, based on information available

Trichloroethylene, stabilized Revision Date Oct-2018

10.2. Chemical stability

Light sensitive.

10.3. Possibility of hazardous reactions

Hazardous Polymerization Hazardous Reactions 10.4. Conditions to avoid

No information available. None under normal processing.

Incompatible products. Excess heat. Exposure to light. Exposure to moist air or water.

10.5. Incompatible materials

Strong oxidizing agents. Strong bases. Amines. Alkali metals. Metals. . Powdered

aluminum. Powdered zinc. Powdered magnesium.

10.6. Hazardous decomposition products

Hydrogen chloride gas. Chlorine. Phosgene. Carbon monoxide (CO). Carbon dioxide

CO₂).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Product Information

(a) acute toxicity;

OralBased on available data, the classification criteria are not metDermalBased on available data, the classification criteria are not metInhalationBased on available data, the classification criteria are not met

Component	LD50 Oral	LD50 Dermal	LC50 Inhalation
Trichloroethylene	LD50 = 4920 mg/kg(Rat) LD50 = 4290 mg/kg(Rat)	LD50 > 20 g/kg (Rabbit) LD50 = 29000 mg/kg (Rabbit)	LC50 = 26 mg/L (Rat) 4 h

(b) skin corrosion/irritation; Category 2

(c) serious eye damage/irritation; Category 2

(d) respiratory or skin sensitization;

Respiratory Based on available data, the classification criteria are not met

Skin Category 1

No information available

(e) germ cell mutagenicity; Category 2

Mutagenic effects have occurred in humans

(f) carcinogenicity; Category 1B

The table below indicates whether each agency has listed any ingredient as a carcinogen

Component	EU	UK	Germany	IARC
Trichloroethylene	Carc Cat. 1B		Cat. 1	Group 1

(g) reproductive toxicity; Based on available data, the classification criteria are not met

(h) STOT-single exposure; Category 3

Results / Target organs Central nervous system (CNS).

(i) STOT-repeated exposure; Based on available data, the classification criteria are not met

Target Organs None known.

(i) aspiration hazard: Based on available data, the classification criteria are not met

Revision Date Oct-2018

delayed

Symptoms / effects, both acute and Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting: Symptoms of allergic reaction may include rash, itching, swelling, trouble breathing, tingling of the hands and feet, dizziness, lightheadedness, chest pain, muscle pain or flushing

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity **Ecotoxicity effects**

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Do not empty into drains. The product contains following substances which are hazardous for the environment. Contains a substance which is:. Harmful to aquatic organisms. Toxic to aquatic organisms.

Component	Freshwater Fish	Water Flea	Freshwater Algae	Microtox
Trichloroethylene	LC50: 39 - 54 mg/L, 96h static (Lepomis macrochirus) LC50: 31.4 - 71.8 mg/L, 96h flow-through (Pimephales promelas)	EC50: = 2.2 mg/L, 48h (Daphnia magna)	EC50: = 175 mg/L, 96h (Pseudokirchneriella subcapitata) EC50: = 450 mg/L, 96h (Desmodesmus subspicatus)	EC50 = 115 mg/L 10 min

12.2. Persistence and degradability

Persistence Persistence is unlikely, based on information available.

See values below. Degradability

Component	Degradability
Trichloroethylene	2.4 % (14d) OECD 301C
79-01-6 (100)	···

Degradation in sewage treatment plant

Contains substances known to be hazardous to the environment or not degradable in waste water treatment plants.

Bioaccumulation is unlikely 12.3. Bioaccumulative potential

Component	log Pow	Bioconcentration factor (BCF)
Trichloroethylene	2.29	90 (fish)

12.4. Mobility in soil

The product contains volatile organic compounds (VOC) which will evaporate easily from all surfaces Will likely be mobile in the environment due to its volatility. Disperses rapidly in

12.5. Results of PBT and vPvB

assessment

Substance is not considered persistent, bioaccumulative and toxic (PBT) / very persistent and very bioaccumulative (vPvB).

12.6. Other adverse effects

Endocrine Disruptor Information Persistent Organic Pollutant Ozone Depletion Potential

This product does not contain any known or suspected endocrine disruptors

This product does not contain any known or suspected substance This product does not contain any known or suspected substance

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Waste from Residues / Unused **Products**

Waste is classified as hazardous. Dispose of in accordance with the European Directives on waste and hazardous waste. Dispose of in accordance with local regulations.

Contaminated Packaging

Dispose of this container to hazardous or special waste collection point.

European Waste Catalogue (EWC)

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific.

Other Information

Do not dispose of waste into sewer. Waste codes should be assigned by the user based on the application for which the product was used. Do not empty into drains. Do not let this chemical enter the environment.

FSUT3101

Trichloroethylene, stabilized

Revision Date Oct-2018

SECTION 14: TRANSPORT INFORMATION

IMDG/IMO

14.1. UN number UN1710

14.2. UN proper shipping name TRICHLOROETHYLENE

14.3. Transport hazard class(es) 6.1 14.4. Packing group III

<u>ADR</u>

14.1. UN number UN1710

14.2. UN proper shipping name TRICHLOROETHYLENE

14.3. Transport hazard class(es) 6.1 14.4. Packing group III

<u>IATA</u>

14.1. UN number UN1710

14.2. UN proper shipping name TRICHLOROETHYLENE

14.3. Transport hazard class(es) 6.1 14.4. Packing group III

14.5. Environmental hazards No hazards identified

14.6. Special precautions for user No special precautions required

14.7. Transport in bulk according to Not applicable, packaged goods

Annex II of MARPOL73/78 and the

IBC Code

SECTION 15: REGULATORY INFORMATION

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

International Inventories		X = listed	1								
Component	EINECS	ELINCS	NLP	TSCA	DSL	NDSL	PICCS	ENCS	IECSC	AICS	KECL
Trichloroethylene	201-167-4	-		Х	Х	-	Х	Х	Х	Х	Х

Component	REACH (1907/2006) - Annex XIV - Substances Subject to Authorization	REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances	REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC)
Trichloroethylene	Carcinogenic Category 1B Article 57 Application date: October 21, 2014 Sunset date: April 21, 2016 Exemption - None	Use restricted. See item 28. (see http://eur-lex.europa.eu/LexUriServ/LexUriServ.do?uri=CELEX:32006R1907:EN:NOT for restriction details)	SVHC Candidate list - 201-167-4 - Carcinogenic, Article 57a

National Regulations

Component	Germany - Water Classification (VwVwS)	Germany - TA-Luft Class
Trichloroethylene	WGK 3	Class I: 20 mg/m³ (Massenkonzentration)
-		Krebserzeugende Stoffe - Class III: 1 mg/m³
		(Massenkonzentration)

Component	France - INRS (Tables of occupational diseases)
Trichloroethylene	Tableaux des maladies professionnelles (TMP) - RG 3,RG 12

Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment.

Take note of Dir 76/769/EEC relating to restrictions on the marketing and use of certain dangerous substances and preparations Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at

Revision Date Oct-2018

work

15.2. Chemical safety assessment

A Chemical Safety Assessment/Report (CSA/CSR) has been conducted by the manufacturer/importer

SECTION 16: OTHER INFORMATION

Full text of H-Statements referred to under sections 2 and 3

H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H319 - Causes serious eye irritation

H336 - May cause drowsiness or dizziness

H341 - Suspected of causing genetic defects

H350 - May cause cancer

H412 - Harmful to aquatic life with long lasting effects

CAS - Chemical Abstracts Service

EINECS/ELINCS - European Inventory of Existing Commercial Chemical DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances/EU List of Notified Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances IECSC - Chinese Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

WEL - Workplace Exposure Limit

ACGIH - American Conference of Governmental Industrial Hygienists

DNEL - Derived No Effect Level

RPE - Respiratory Protective Equipment LC50 - Lethal Concentration 50%

NOEC - No Observed Effect Concentration

PBT - Persistent, Bioaccumulative, Toxic

ADR - European Agreement Concerning the International Carriage of

Dangerous Goods by Road

IMO/IMDG - International Maritime Organization/International Maritime

Dangerous Goods Code

OECD - Organisation for Economic Co-operation and Development

BCF - Bioconcentration factor

Key literature references and sources for data

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

Training Advice

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

Chemical incident response training.

Creation Date Oct-2013 **Next Revision Date** Oct-2023

SDS section 1 updated and update of Format. **Revision Summary**

This safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006

Disclaimer

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

End of Safety Data Sheet

Legend

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

Substances List

ENCS - Japanese Existing and New Chemical Substances AICS - Australian Inventory of Chemical Substances

NZIoC - New Zealand Inventory of Chemicals

TWA - Time Weighted Average

IARC - International Agency for Research on Cancer

PNEC - Predicted No Effect Concentration

LD50 - Lethal Dose 50%

EC50 - Effective Concentration 50%

POW - Partition coefficient Octanol:Water vPvB - very Persistent, very Bioaccumulative

ICAO/IATA - International Civil Aviation Organization/International Air

Transport Association

MARPOL - International Convention for the Prevention of Pollution from Ships

ATE - Acute Toxicity Estimate

VOC - Volatile Organic Compounds