1. PRODUCT AND COMPANY IDENTIFICATION

Product Name	**Trichlorosilane**
Chemical Formula	$SiHCl_3$
Product Use	Industrial and professional use. Perform risk assessment prior to use.
CAS No.	10025-78-2
INDEX No.	014-001-00-9
EC No.	233-042-5
REACH Reg. No.	01-2119494046-35
Supplier Address	ISOFLEX USA PO Box 472615 San Francisco CA 94147 United States
Telephone	+1 415-440-4433
Fax	+1 415-563-4433
Emergency Phone Number	+1 800-535-5053 (INFOTRAC)
Email	iusa@isoflex.com
Website	www.isoflex.com
Preparation Information	ISOFLEX USA Product Safety +1 415-440-4433

2. HAZARDS IDENTIFICATION

Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 as amended.

Physical Hazards

Substances and mixtures, which in contact with water, emit flammable gases
Category 1 H260: In contact with water releases flammable gas which ignites spontaneously

Flammable liquids
Category 1 H224: Extremely flammable liquid and vapor

Health Hazards

Skin corrosion
Category 1A H314: Causes severe skin burns and eye damage

Label Elements

Contains: Trichlorosaline

Signal Words	Danger
Hazard statement(s)	H224: Extremely flammable liquid and vapor. H260: In contact with water releases flammable gases which may ignite spontaneously. H314: Causes severe skin burns and eye damage.
Precautionary statements	
Prevention	P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P231+P232: Handle and store contents under inert gas. Protect from moisture. P233: Keep container tightly closed. P261: Avoid breathing dust/fume/gas/mist/vapors/spray. P280: Wear protective gloves/protective clothing/eye protection/face protection.
Response	P301+P310: IF SWALLOWED: Immediately call a POISON CENTER/ doctor. 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 remove. Continue rinsing. P370+P378: In case of fire: Use foam to extinguish.
Storage	P403+P235: Store in a well-ventilated place. Keep cool. P405: Store locked up.
Disposal	None.
Supplemental label information	
	EUH014: Reacts violently with water. EUH029: Contact with water liberates toxic gas. EUH071: Corrosive to the respiratory tract.
Other hazards	None.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name:	Trichlorosilane
INDEX No.:	014-001-00-9
CAS No.:	10025-78-2
EC No.:	233-042-5
REACH Registration No.:	01-2119494046-35
Purity:	100% The purity of the substance in this section is used for classification only, and does not represent the actual purity of the substance as supplied, for which other documentation should be consulted.
Trade Name:	Trichlorosilane 3.7

4. FIRST AID MEASURES

General	Remove victim to uncontaminated area wearing self-contained breathing apparatus. Keep victim warm and rested. Call a doctor. Apply artificial respiration if breathing has stopped.
Inhalation Exposure	Remove the exposed person to fresh air at once. If breathing stops, provide artificial respiration. Symptoms may include dizziness, nausea, vomiting.
Dermal Exposure	Immediately flush with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Get medical attention immediately.
Eye Exposure	Rinse the eye with water immediately. Remove contact lenses, if present and easy to do. Continue rinsing. Flush thoroughly with water for at least 15 minutes. Get immediate medical assistance. If medical assistance is not immediately available, flush an additional 15 minutes.
Ingestion	Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit does not enter the lungs. Get medical attention immediately.
Most Important Symptoms	Causes severe skin burns and eye damage. May be fatal if swallowed. Vapor concentrations above recommended exposure levels are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anesthetic and may have other severe central nervous system effects.
Treatment	Do not give direct mouth-to-mouth resuscitation if swallowed. To protect rescuer, use air-viva, oxy-viva or one-way mask. Resuscitate in a well-ventilated area. If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately. Treat with a corticosteroid spray as soon as possible after inhalation.

5. FIREFIGHTING MEASURES

General Fire Hazards	Heat may cause the containers to explode. USE WATER WITH CAUTION.
Suitable Extinguishing Media	Dry powder. Dry sand. Foam. Carbon dioxide.
Unsuitable Extinguishing Media	Water. Water spray or fog.
Special Hazards	Fire or excessive heat may produce hazardous decomposition products.
Hazardous Decomposition Products	Silicon oxides. Hydrogen chloride.
Firefighting Instructions	In case of fire: Stop leak if safe to do so. Use of water may result in the formation of very toxic aqueous solutions. Keep run-off water out of sewers and water sources. Dike for water control. Continue water spray from protected position until container stays cool. Use extinguishants to contain the fire. Isolate the source of the fire or let it burn out.
Special Protective Equipment for Firefighters	Gas-tight chemically protective clothing (Type 1) in combination with self-contained breathing apparatus. Guideline: EN 943-2 Protective clothing against liquid and gaseous chemicals, aerosols and solid particles. Performance requirements for gas-tight (Type 1) chemical protective suits for emergency teams (ET).

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Evacuate area. Provide adequate ventilation. Consider the risk of potentially explosive atmospheres. In case of leakage, eliminate all ignition sources. Monitor the concentration of the released product. Prevent from entering sewers, basements and work pits, or any place where its accumulation can be dangerous. Wear self-contained breathing apparatus when entering area unless atmosphere is proved to be safe. EN 137 Respiratory protective devices – Self-contained open-circuit compressed air breathing apparatus with full face mask – Requirements, testing, marking.

Environmental Precautions

Prevent further leakage or spillage if safe to do so. Reduce vapor with fog or fine water spray. Keep run-off water out of sewers and water sources. Dike for water control.

Containment and Cleanup

Provide adequate ventilation. Eliminate sources of ignition. Wash contaminated equipment or sites of leaks with copious quantities of water.

Reference to Other Sections

Refer to sections 8 and 13.

7. HANDLING AND STORAGE

Precautions for Safe Handling:

Do not handle until all safety precautions have been read and understood. Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Purge system with dry inert gas (e.g. helium or nitrogen) before product is introduced and when system is placed out of service. Containers, which contain or have contained flammable or explosive substances, must not be inerted with liquid carbon dioxide. Assess the risk of a potentially explosive atmosphere and the need for suitable equipment (i.e. explosion-proof). Take precautionary measures against static discharges. Keep away from ignition sources (including static discharges). Provide electrical earthing of equipment and electrical equipment usable in explosive atmospheres. Use non-sparking tools. Refer to supplier's handling instructions. The substance must be handled in accordance with good industrial hygiene and safety procedures. Ensure that the complete system has been (or is regularly) checked for leaks before use. Protect containers from physical damage; do not drag, roll, slide or drop. Do not remove or deface labels provided by the supplier for the identification of the container contents. When moving containers, even for short distances, use appropriate equipment (e.g. trolley, hand truck, fork truck, etc.). Provide adequate ventilation. Suck-back of water into the container must be prevented. Do not allow back-feed into the container. Avoid suck-back of water, acid and alkalis. Keep container below 50°C in a well-ventilated place. Observe all regulations and local requirements regarding storage of containers. When using, do not eat, drink or smoke. Store in accordance with local/ regional/national/international regulations. Never use direct flame or electrical heating devices to raise the pressure of a container. Leave valve protection caps in place until the container has been secured against either a wall or bench or placed in a container stand and is ready for use. Close container valve after each use and when empty, even if still connected to the equipment.

Conditions for Safe Storage

All electrical equipment in the storage areas should be compatible with the risk of a potentially explosive atmosphere. Segregate from oxidant

gases and other oxidants being stored. Containers should not be stored in conditions likely to encourage corrosion. Stored containers should be periodically checked for general conditions and leakage. Store containers in location free from fire risk and away from sources of heat and ignition. Keep away from combustible material.

Specific End Use(s) None.

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8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control Parameters

Occupational Exposure Limits

Chemical Name	Type	Exposure Limit Values	Source
Trichlorosilane – as HCl	TWA	5 ppm 8 mg/m3	EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 200/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU (12 2009)
	STEL	10 ppm 15 mg/m3	EU. Indicative Exposure Limit Values in Directives 91/322/EEC, 200/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU (12 2009)

DNEL Values

Critical Component	Type	Value	Remarks
Trichlorosilane	Workers – Dermal, Systemic, long-term	0,02 mg/kg bw/day	Repeated dose toxicity
	Workers – Inhalation, Systemic, long-term	0,45 mg/m3	Repeated dose toxicity
	Workers – Inhalation, Systemic, short-term	0,45 mg/m3	Repeated dose toxicity
	Workers – Inhalation, Local, long-term	0,23 mg/m3	Respiratory tract irritation
	Workers – Inhalation, Local, short-term	0,23 mg/m3	Respiratory tract irritation

PNEC Values

Critical Component	Type	Value	Remarks
Trichlorosilane	Sewage treatment plant	1 mg/l	-

Exposure Controls

Appropriate Engineering Controls Consider a work permit system (e.g. for maintenance activities). Ensure adequate air ventilation. Provide adequate general and local exhaust ventilation. Keep concentrations well below occupational exposure limits. Gas detectors should be used when toxic quantities may be released. Gas detectors should be used when quantities of flammable gases or vapors may be released. Systems under pressure should be regularly

	checked for leakages. Product to be handled in a closed system and under strictly controlled conditions. Only use permanent leak-tight installations (e.g. welded pipes). Take precautionary measures against static discharges. Do not eat, drink or smoke when using the product.
Eye/Face Protection	Safety eyewear, goggles or face shield to EN 166 should be used to avoid exposure to liquid splashes. Wear eye protection to EN 166 when using gases. Guideline: EN 166 Personal Eye Protection.
Skin and Hand Protection	Wear working gloves while handling containers. Guideline: EN 388 Protective gloves against mechanical risks. Chemically resistant gloves complying with EN 374 should be worn at all times. Guideline: EN 374-1/2/3 Protective gloves against chemicals and microorganisms. Materials suitable for short-term contact and/or liquid splashes. Material: Nitrile. Materials suitable for prolonged direct contact. Material: Viton rubber (fluor rubber). Break-through time: 6 hours.
Body Protection	Wear fire-resistant or flame-retardant clothing. Wear acid-resistant protective clothing. Guideline: ISO/TR 2801:2007 Clothing for protection against heat and flame. General recommendations for selection, care and use of protective clothing. Guideline: EN 14605 Protective clothing against liquid chemicals.
	Wear safety shoes while handling containers. Guideline: ISO 20345 Personal protective equipment – Safety footwear.
Respiratory Protection	Reference should be made to European Standard EN 689 for methods for the assessment of exposure by inhalation to chemical agents and national guidance documents for methods for the determination of hazardous substances. The selection of the Respiratory Protective Device (RPD) must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected RPD. When a risk assessment shows that air-purifying respirators are appropriate then they may be used as a backup to engineering controls. If the respirator is the sole means of protection, use a full face supplied air respirator.
	Material: Filter AXBEK. Guideline: EN 14387 Respiratory protective devices. Gas filter(s) and combined filter(s). Requirements, testing, marking. Guideline: EN 136 Respiratory protective devices. Full face masks. Requirements, testing, marking. Guideline: EN 137 Respiratory protective devices – Self-contained open-circuit compressed air breathing apparatus with full face mask – Requirements, testing, marking.
Thermal Hazards	No precautionary measures are necessary.
Hygiene Measures	Obtain special instructions before use. Specific risk management measures are not required beyond good industrial hygiene and safety procedures. Do not eat, drink or smoke when using the product.
Environmental Exposure Controls	For waste disposal, see section 13.

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9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form	Liquid
Color	Colorless
Odor	Pungent
Odor Threshold	Odor threshold is subjective and is inadequate to warn of over-exposure.

Safety Data

pH	Not applicable
Freezing Point	-126.5°C Experimental result, Key study
Boiling Point	31.5-33°C (101.3 kPa) Experimental result, Key study
Sublimation Point	Not applicable
Critical Temperature (°C)	No data available
Flash Point	-27°C
Evaporation Rate	No data available
Flammability	Flammable liquid
Flammability Limit (Upper)	70% (V) Experimental result, Supporting study
Flammability Limit (Lower)	6.9% (V)
Vapor Pressure	72.188 Pa (22.5°C) Experimental result, Key study
Vapor Density	4.67 AIR=1
Relative Density	1.3417 (20°C)
Solubility in Water	Reacts violently with water
Partition Coefficient	Not known (n-octanol/water)
Autoignition Temperature	224°C Experimental result, Key study
Decomposition Temperature	Decomposition at elevated temperature to liberate hydrogen and deposit a high-purity silicon, which leads to some of the principal uses of silanes
Kinematic Viscosity	0.23 mm2/s (20°C)
Dynamic Viscosity	0.332 mPa.s (20°C)
Explosive Properties	Not applicable
Oxidizing Properties	Not applicable
Molecular Weight	135.47 g/mol (SiHCl3)
VOC Content	EC Directive 2004/42: 1.000 g/l ~ 100% (calculated)

10. STABILITY AND REACTIVITY

Reactivity	No reactivity hazard other than the effects described below
Chemical Stability	Stable under normal conditions
Possible Hazardous Reactions	Can form a potentially explosive atmosphere in air. May react violently with oxidants. Reacts with water.
Conditions to Avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Incompatible Materials	Air and oxidizers. Reacts with water to form corrosive acids. With water causes rapid corrosion of some metals. For material compatibility see latest version of ISO-11114.
Hazardous Decomposition Products	Under normal conditions of storage and use, hazardous decomposition products should not be produced. If involved in a fire, the following toxic and/or corrosive fumes may be produced by thermal decomposition: Silica dust (inert – but may irritate respiratory tract and eyes). Hydrogen chloride.

11. TOXICOLOGICAL INFORMATION

Acute Toxicity – Oral	
Product	Based on available data, the classification criteria are not met.
Trichlorosilane	LD 50 (Rat): 1.030 mg/kg. Remarks: Experimental result, Key study
Acute Toxicity – Dermal	
Product	Based on available data, the classification criteria are not met.
Acute Toxicity – Inhalation	
Product	Based on available data, the classification criteria are not met.
Trichlorosilane	LC 50 (Rat, 1 h): 2767 ppm. Remarks: Vapor Experimental result, Key study

Repeated Dose Toxicity

Trichlorosilane	NOAEL (Mouse, Rat (Female, Male), Inhalation, 90 d): 20 ppm(m) Inhalation Read-across from supporting substance (structural analogue or surrogate), Key study

Skin Corrosion/Irritation

Product	Causes severe burns.

Serious Eye Damage/Irritation

Product	Causes serious eye damage.

Respiratory/Skin Sensitization

Product	Based on available data, the classification criteria are not met.

Germ Cell Mutagenicity

Product	Based on available data, the classification criteria are not met.

Carcinogenicity

Product	Based on available data, the classification criteria are not met.

Reproductive Toxicity

Trichlorosilane	Rat Oral – NOAEL – No Observable Adverse Effect Level – 1.000 mg/kg bw/day

Developmental Toxicity

Product	Based on available data, the classification criteria are not met.

STOT - Single Exposure

Product	Based on available data, the classification criteria are not met.

STOT - Repeated Exposure

Product	Based on available data, the classification criteria are not met.

Aspiration Hazard

Product	Based on available data, the classification criteria are not met.

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12. ECOLOGICAL INFORMATION

Acute Toxicity

Product	No ecological damage caused by this product.

Acute Toxicity – Fish

Trichlorosilane	LC 50 (*Oncorhynchus mykiss*, 96 h): >100 mg/l (Static) Remarks: Read-across from supporting substance (structural analogue or surrogate), Key study

Acute Toxicity – Aquatic Invertebrates

Trichlorosilane	EC 50 (*Daphnia magna*, 48 h): >75 mg (flow-through) Remarks: Read-across from supporting substance (structural analogue or surrogate), Supporting study

Toxicity to Aquatic Plants

Trichlorosilane	EC 50 (*Alga*, 72 h): > 100 mg/l

Persistence and Degradability	Not relevant
Bioaccumulative Potential	Study not necessary due to exposure considerations

Mobility in Soil	The substance has low mobility in soil.
PBT and vPvB Assessment	Not classified as PBT or vPvB.
Other Adverse Effects	May cause pH changes in aqueous ecological systems.

13. DISPOSAL CONSIDERATIONS

Product/Packaging	Avoid discharges to atmosphere. Consult supplier for specific recommendations. Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. Dispose of container via supplier only. Discharge, treatment or disposal may be subject to national, state or local laws. Gas may be scrubbed in alkaline solution under controlled conditions to avoid violent reaction. Toxic and corrosive gases formed during combustion should be scrubbed before discharge to atmosphere. Do not discharge into areas where there is a risk of forming an explosive mixture with air. Waste gas should be flared through a suitable burner with flash-back arrestor. Gases formed by combustion should be washed with water to remove silica.
European Waste Codes	Container – 16 05 04*: Gases in pressure containers (including halons) containing dangerous substances.

14. TRANSPORT INFORMATION

ADR

UN No.	UN 1295
Proper Shipping Name	TRICHLOROSILANE
Transport Hazard Class(es)	
Class	4.3
Label(s)	4.3, 3, 8
Hazard No. (ADR)	X338
Tunnel restriction code	(B/E)
Packing Group:	I
Environmental Hazards	Not applicable
Special Precautions for User	-

RID

UN No.	UN 1295
Proper Shipping Name	TRICHLOROSILANE
Transport Hazard Class(es)	
Class	4.3
Label(s)	4.3, 3, 8
Packing Group:	I
Environmental Hazards	Not applicable
Special Precautions for User	-

IMDG

UN No.	UN 1295

Proper Shipping Name	TRICHLOROSILANE
Transport Hazard Class(es)	
Class	4.3
Label(s)	4.3, 8, 3
EmS No.	F-G, S-O
Packing Group:	I
Environmental Hazards	Not applicable
Special Precautions for User	-

IATA

UN No.	UN 1295
Proper Shipping Name	TRICHLOROSILANE
Transport Hazard Class(es)	
Class	4.3
Label(s)	-
Packing Group:	-
Environmental Hazards	Not applicable
Special Precautions for User	_
Other Information	
Passenger/cargo aircraft	Forbidden
Cargo aircraft only	Forbidden

Transport in bulk according to Annex II of MARPOL and the IBC Code: Not applicable

Additional Identification Avoid transport on vehicles where the load space is not separated from the driver's compartment. Ensure vehicle driver is aware of the potential hazards of the load and knows what to do in the event of an accident or an emergency. Before transporting product containers, ensure that they are firmly secured. Ensure that the container valve is closed and not leaking. Ensure adequate air ventilation.

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15. REGULATORY INFORMATION

EU Regulations

Regulation (EC) No. 1907/2006 Annex XVII Substances subject to restriction on marketing and use:

Chemical Name	CAS No.	Concentration
Trichlorosilane	10025-78-2	100%

EU Directive 2012/18/EU (SEVESO III) on major accident hazards involving dangerous substances, as amended:

Classification	Lower-tier Requirements	Upper-tier Requirements
P5a: Flammable liquids, Category 1; Flammable liquids Category 2 or 3 maintained at a temperature above their boiling point; Other liquids with a flash point # 60°C, maintained at a temperature above their boiling point	10 t	50 t
01: Substances or mixtures with hazard statement EUH014	100 t	500 t
03: Substances or mixtures with hazard statement EUH029	50 t	200 t

Directive 98/24/EC on the protection of workers from the risks related to chemical agents at work:

Chemical Name	CAS No.	Concentration
Trichlorosilane	10025-78-2	100%

National Regulations

Council Directive 89/391/EEC on the introduction of measures to encourage improvements in the safety and health of workers at work Directive 89/686/EEC on personal protective equipment Directive 2014/34/EU on equipment and protective systems intended for use in potentially explosive atmospheres (ATEX) Only products that comply with the food regulations (EC) No. 1333/2008 and (EU) No. 231/2012 and are labelled as such may be used as food additives.

16. OTHER INFORMATION

Prepared by	ISOFLEX USA PO Box 29475 San Francisco CA 94129 United States
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Revision Date	October 20, 2024
Revision Number	2
Revision Note	Update Supplier Address

ISOFLEX USA's Commonly Used Abbreviations and Acronyms*

ACGIH	American Conference of Governmental Industrial Hygienists
ADR	European Agreement Concerning the International Carriage of Dangerous Goods by Road
AICS	Australian Inventory of Chemical Substances
ALARA	As Low As Is Reasonably Achievable
AMU	Atomic Mass Unit
ANSI	American National Standards Institute
BLS	Basic Life Support
BOD5	Biochemical Oxygen Demand
CAM	Continuous Air Monitor
CAS	Chemical Abstracts Service (division of the American Chemical Society)
CEN	European Committee for Standardization
CERCLA	Comprehensive Environmental Response Compensation and Liability Act

CLP	Classification, Labelling and Packaging (European Union)
COD	Chemical Oxygen Demand
CPR	Controlled Products Regulations (Canada)
CWA	Clean Water Act (USA)
DAC	Derived Air Concentration (USA)
DOE	United States Department of Energy (USA)
DOT	United States Department of Transportation (USA)
DSL	Domestic Substances List (Canada)
EC50	Half Maximal Effective Concentration
ECL	Korean Existing Chemicals List
EINECS	European Inventory of Existing Commercial Chemical Substances
EHS	Environmentally Hazardous Substance
ELINCS	European List of Notified Chemical Substances
EMS	Emergency Response Procedures for Ships Carrying Dangerous Goods
EPA	Environmental Protection Agency (USA)
EPCRA	Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986
GHS	Globally Harmonized System
HMIS	Hazardous Materials Identification System (USA)
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IBC	Intermediate Bulk Containers
ICAO	International Civil Aviation Organization
IDLH	Immediately Dangerous to Life or Health
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
IMDG	International Maritime Code for Dangerous Goods
LC50	Lethal concentration, 50 percent
LD50	Lethal dose, 50 percent
LDLO	Lethal Dose Low
LOEC	Lowest-Observed-Effective Concentration
MARPOL	International Convention for the Prevention of Pollution from Ships
MSHA	Mine Safety and Health Administration (USA)
NCRP	National Council on Radiation Protection & Measurements (USA)
NDSL	Non-Domestic Substances List (Canada)
NFPA	National Fire Protection Association (USA)
NIOSH	National Institute for Occupational Safety and Health (USA)
NOEC	No Observed Effect Concentration
N.O.S.	Not Otherwise Specified
NRC	Nuclear Regulatory Commission (USA)
NTP	National Toxicology Program (USA)
OSHA	Occupational Safety and Health Administration (USA)
PBT	Persistent Bioaccumulative and Toxic Chemical
PEL	Permissible Exposure Limit
PICCS	Philippines Inventory of Chemicals and Chemical Substances
PIH	Poisonous by Inhalation Hazard
RCRA	Resource Conservation and Recovery Act (USA)
RCT	Radiation Control Technician
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals (Europe)
RID	Regulations Concerning the International Transport of Dangerous Goods by Rail
RQ	Reportable Quantity
RTECS	Registry of Toxic Effects of Chemical Substances
SARA	Superfund Amendments and Reauthorization Act (USA)
SNUR	Significant New Use Rule (TSCA)
TDG	Transportation of Dangerous Goods (Canada)
TIH	Toxic by Inhalation Hazard
TLV	Threshold Limit Value
TPQ	Threshold Planning Quantity
TSCA	Toxic Substances Control Act
TWA	Time Weighted Average
UN	United Nations (Number)

VOC	Volatile Organic Compound
vPvB	Very Persistent Very Bioaccumulative Chemical
WGK	Wassergefährdungsklassen (Germany: Water Hazard Classes)
WHMIS	Workplace Hazardous Materials Information System

*One or more of the above-listed items may not appear in this document.

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