

Version 1.6

Revision Date: 05/24/2022

#### SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name	: PERCHLOROETHYLENE
CAS Name	: 127-18-4
Recommended use of the o	chemical and restrictions on use

Recommended use : Refrigerant

: Refrigerant Metal cleaner

#### Manufacturer or supplier's details

Company	: China Amines Co., Ltd				
Address	UNIT 1021, BEVERLEY COMMERCIAL				
	CENTRE, 87-105CHATHAM ROAD SOUTH,				
	TSIM SHA TSUI, KOWLOON HONG KONG				

Emergency telephone number: Transport North America: CHEMTREC (1-800-424-9300) CHEMTREC INTERNATIONAL Tel # 703-527-3887

# Additional Information: : Responsible Party: Product Compliance Department E-mail:.info@chinaamines.com SDS Requests:+86 18938922889 Website: www.chinaamines.com

#### **SECTION 2. HAZARDS IDENTIFICATION**

GHS Classification Acute toxicity (Inhalation)	: Category 4	
Skin irritation	: Category 2	
Eye irritation	: Category 2B	
Carcinogenicity	: Category 1B	
Specific target organ toxicity - single exposure	: Category 1 (Central nervous system, Liver, Respiratory system)	
Specific target organ toxicity - single exposure	: Category 3 (Central nervous system)	
Specific target organ toxicity - repeated exposure	: Category 2 (Liver, Kidney, Central nervous system, Respiratory system)	
GHS label elements Hazard pictograms		
Signal word	: Danger	



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Hazard statements	<ul> <li>H315 + H320 Causes skin and eye irritation.</li> <li>H332 Harmful if inhaled.</li> <li>H336 May cause drowsiness or dizziness.</li> <li>H350 May cause cancer.</li> <li>H370 Causes damage to organs.</li> <li>H373 May cause damage to organs through prolonged or repeated exposure.</li> </ul>
Precautionary statements	<ul> <li>Prevention:</li> <li>P201 Obtain special instructions before use.</li> <li>P202 Do not handle until all safety precautions have been read and understood.</li> <li>P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.</li> <li>P264 Wash skin thoroughly after handling.</li> <li>P270 Do not eat, drink or smoke when using this product.</li> <li>P271 Use only outdoors or in a well-ventilated area.</li> <li>P280 Wear protective gloves/ protective clothing/ eye protectio face protection.</li> <li>Response:</li> <li>P302 + P352 IF ON SKIN: Wash with plenty of soap and water P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell.</li> <li>P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and east to do. Continue rinsing.</li> <li>P307 + P311 IF exposed: Call a POISON CENTER or doctor/ physician.</li> <li>P332 + P313 If skin irritation occurs: Get medical advice/ atten tion.</li> <li>P362 Take off contaminated clothing and wash before reuse.</li> <li>Storage:</li> <li>P403 + P233 Store in a well-ventilated place. Keep container tightly closed.</li> <li>P405 Store locked up.</li> <li>Disposal:</li> <li>P501 Dispose of contents/ container to an approved waste disposal plant.</li> </ul>

None known.

#### SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

#### Hazardous components

CAS-No.	Chemical name	Weight percent			
127-18-4	Tetrachloroethylene	90 - 100			
56-23-5	Carbon tetrachloride	0.1 - 1			
Actual concentration is withheld as a trade secret					

Actual concentration is withheld as a trade secret



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Any Concentration shown	n as a range is due to batch variation.
Molecular formula	: C2-Cl4
Synonyms	: Ethylene tetrachloride, Perchloroethylene, Tetrachlorethylene, 1,1,2,2-Tetrachloroethylene,
ECTION 4. FIRST AID MEA	SURES
General advice	: Move out of dangerous area. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended.
If inhaled	: Consult a physician after significant exposure. If unconscious, place in recovery position and seek medical advice.
In case of skin contact	: If skin irritation persists, call a physician.

General advice	: Move out of dangerous area. Show this safety data sheet to the doctor in attendance. Do not leave the victim unattended.
If inhaled	: Consult a physician after significant exposure. If unconscious, place in recovery position and seek medical advice.
In case of skin contact	<ul> <li>If skin irritation persists, call a physician.</li> <li>If on skin, rinse well with water.</li> <li>If on clothes, remove clothes.</li> </ul>
In case of eye contact	<ul> <li>Immediately flush eye(s) with plenty of water.</li> <li>Remove contact lenses.</li> <li>Protect unharmed eye.</li> <li>Keep eye wide open while rinsing.</li> <li>If eye irritation persists, consult a specialist.</li> </ul>
If swallowed	<ul> <li>Do not induce vomiting without medical advice.</li> <li>Keep respiratory tract clear.</li> <li>Do not give milk or alcoholic beverages.</li> <li>Never give anything by mouth to an unconscious person.</li> <li>If symptoms persist, call a physician.</li> <li>Take victim immediately to hospital.</li> </ul>

#### **SECTION 5. FIREFIGHTING MEASURES**

Suitable extinguishing media	: Use an extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	: High volume water jet
Specific hazards during fire- fighting	: Do not allow run-off from fire fighting to enter drains or water courses.
Hazardous combustion prod- ucts	: Carbon oxides Chlorine compounds
Specific extinguishing meth- ods	: Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Further information	: Collect contaminated fire extinguishing water separately. This



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	must not be discharged into drains.
Special protective equipment for firefighters	: Wear self-contained breathing apparatus for firefighting if nec- essary. Use personal protective equipment.

#### SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protec- tive equipment and emer- gency procedures	:	Use personal protective equipment.
Environmental precautions	:	Prevent product from entering drains. Prevent further leakage or spillage if safe to do so. If the product contaminates rivers and lakes or drains inform respective authorities.
Methods and materials for containment and cleaning up	:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

#### SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion	Normal measures for preventive fire protection.	
Advice on safe handling	Avoid formation of aerosol. Do not breathe vapours/dust. Avoid exposure - obtain special instructions before use. Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the ap plication area. Provide sufficient air exchange and/or exhaust in work room Dispose of rinse water in accordance with local and national regulations. Persons susceptible to skin sensitisation problems or asthma allergies, chronic or recurrent respiratory disease should no be employed in any process in which this mixture is being used.	ns. Il na,
Conditions for safe storage	Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed an kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.	



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#### SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### Components with workplace control parameters

CAS-No.	Components	Value type (Form of exposure)	Control parame- ters / Permissible concentration	Basis
127-18-4	Tetrachloroethylene	TWA	25 ppm	ACGIH
		STEL	100 ppm	ACGIH
		TWA	100 ppm	OSHA Z-2
		CEIL	200 ppm	OSHA Z-2
		Peak	300 ppm	OSHA Z-2
		TWA	25 ppm 170 mg/m3	OSHA P0
56-23-5	Carbon tetrachloride	TWA	5 ppm	ACGIH
		STEL	10 ppm	ACGIH
		ST	2 ppm 12.6 mg/m3	NIOSH REL
		TWA	10 ppm	OSHA Z-2
		CEIL	25 ppm	OSHA Z-2
		Peak	200 ppm	OSHA Z-2
		TWA	2 ppm 12.6 mg/m3	OSHA P0

#### Personal protective equipment

Respiratory protection	:	No personal respiratory protective equipment normally re- quired. In the case of vapour formation use a respirator with an ap- proved filter.
Hand protection		
Remarks	:	The suitability for a specific workplace should be discussed with the producers of the protective gloves.
Eye protection	:	Eye wash bottle with pure water Tightly fitting safety goggles Wear face-shield and protective suit for abnormal processing problems.
Skin and body protection	:	Impervious clothing Choose body protection according to the amount and concen- tration of the dangerous substance at the work place.
Hygiene measures	:	When using do not eat or drink. When using do not smoke. Wash hands before breaks and at the end of workday.

#### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance

: liquid





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Colour	: Clear, Colorless
Odour	: mild, sweet
Odour Threshold	: 50 ppm
рН	: No data available
Freezing Point (Freezing Point)	: -19 °C (-2 °F)
Boiling Point (Boiling point/boiling range)	: 121 °C (250 °F)
Flash point	: not determined
Evaporation rate	: 0.1
Flammability (solid, gas)	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: 13 mmHg @ 20 °C (68 °F)
Relative vapour density	: 5.8 @ 20 - 25 °C (68 - 77 °F) (Air = 1.0)
Relative density	: 1.62 @ 25 °C (77 °F) Reference substance: (water = 1)
Density	: No data available
Solubility(ies) Water solubility	: insoluble
Solubility in other solvents	: No data available
Partition coefficient: n- octanol/water	: log Pow: 2.88
Auto-ignition temperature	: No data available
Thermal decomposition	: No data available

#### SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.	
Chemical stability	: Stable under normal conditions.	



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Possibility of hazardous reac- tions	: No hazards to be specially mentioned.
Conditions to avoid	: Keep away from heat, flame, sparks and other ignition sources.
Incompatible materials	: Acids Aluminium Bases Oxygen Peroxides
Hazardous decomposition products	: hydrogen chloride Chlorine Phosgene Carbon oxides

#### SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity	
Product:	
Acute oral toxicity	: Acute toxicity estimate: 3,271 mg/kg
Acute inhalation toxicity	: Assessment: The component/mixture is moderately toxic after short term inhalation.
Acute dermal toxicity	: Acute toxicity estimate: > 5,000 mg/kg
<u>Components:</u>	
56-23-5:	
Acute oral toxicity	: LD50 (Rat): 50 mg/kg Assessment: The component/mixture is toxic after single in- gestion.
Acute inhalation toxicity	: (Rat): 8 mg/l Assessment: The component/mixture is toxic after short term inhalation.
Acute dermal toxicity	: Assessment: The component/mixture is toxic after single con- tact with skin.
Skin corrosion/irritation	
<u>Components:</u> 127-18-4: Species: Rabbit Exposure time: 4 h Result: Irritating to skin.	



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**56-23-5:** Species: Rabbit Result: Irritating to skin.

#### Serious eye damage/eye irritation

#### **Components:**

**127-18-4:** Species: Rabbit Result: Irritating to eyes.

**56-23-5:** Species: Rabbit Result: Irritating to eyes.

#### Respiratory or skin sensitisation

#### **Components:**

**127-18-4:** Test Type: lymph node assay Species: Mouse Result: The product is a skin sensitiser, sub-category 1B.

#### Germ cell mutagenicity

Components:	
56-23-5:	
Genotoxicity in vitro :	Test Type: Ames test Species: Salmonella typhimurium Result: negative
Genotoxicity in vivo :	Test Type: In vivo micronucleus test Species: Mouse Result: negative
Germ cell mutagenicity - : Assessment	Tests on bacterial or mammalian cell cultures did not show mutagenic effects.

#### Carcinogenicity

#### **Components:**

**127-18-4:** Species: Mouse, (male and female) Application Route: inhalation (vapour) Exposure time: 103 wks Dose: 0, 100, 200 ppm Frequency of Treatment: 6 h/d, 5 d/wk LOAEL: 100 ppm

Result: evidence of carcinogenic activity Symptoms: increase incidence of hepatocellular carcinomas



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Carcinogenicity - Assess- ment	: Suspected human carcinogens	
<b>56-23-5:</b> Species: Mouse NOAEL: 9.9 mg/kg bw/day		
Carcinogenicity - Assess- ment	: Suspected human carcinogens	
IARC	Group 2A: Probably carcinogenic to human	IS
	127-18-4	Tetrachloroethylene
	Group 2B: Possibly carcinogenic to human	S
	56-23-5	Carbon tetrachloride
OSHA	No component of this product present at level equal to 0.1% is on OSHA's list of regulated	
NTP	Reasonably anticipated to be a human card	cinogen
	127-18-4	Tetrachloroethylene
	56-23-5	Carbon tetrachloride
Reproductive toxicity		
<u>Components:</u> 56-23-5: Effects on foetal develop- ment	: Species: Rat Embryo-foetal toxicity: Lowest observed 112.5 mg/kg body weight	adverse effect level:

Teratogenicity - Assessment : teratogenicity classification is not possible

#### STOT - single exposure

#### Product:

Target Organs: Central nervous system, Liver, Respiratory system Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 1.

Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

#### Components:

**127-18-4:** Target Organs: Central nervous system



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Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

#### 56-23-5:

Exposure routes: Inhalation Target Organs: Central nervous system Assessment: May cause drowsiness or dizziness., The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with narcotic effects.

#### STOT - repeated exposure

#### Product:

Target Organs: Liver, Kidney, Central nervous system, Respiratory system Assessment: The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.

#### **Components:**

#### 56-23-5:

Exposure routes: Inhalation Target Organs: Kidney, Liver Assessment: Causes damage to organs through prolonged or repeated exposure., The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 1.

#### **Further information**

#### Product:

Remarks: Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting. Concentrations substantially above the TLV value may cause narcotic effects. Solvents may degrease the skin.

#### SECTION 12. ECOLOGICAL INFORMATION

#### Ecotoxicity

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<u>Components:</u>	
127-18-4:	
Toxicity to fish	: LC50 (Limanda limanda (Marlin)): 5 mg/l Exposure time: 96 h Test Type: flow-through test
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): 8.5 mg/l Exposure time: 48 h Test Type: static test
Toxicity to algae	<ul> <li>EC50 (Chlamydomonas reinhardtii): 3.64 mg/l End point: Growth rate Exposure time: 72 h Test Type: Closed system</li> </ul>



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Acute aquatic toxicity- As- sessment	: Toxic to aquatic life.
Chronic aquatic toxicity- As- sessment	: Toxic to aquatic life with long lasting effects.
56-23-5:	
Toxicity to fish	: LC50 (Danio rerio (zebra fish)): 24.3 mg/l Exposure time: 4 d Test Type: flow-through test
Toxicity to daphnia and other aquatic invertebrates	: EC50 (Daphnia magna (Water flea)): > 770 mg/l Exposure time: 24 h Test Type: static test
Toxicity to algae	: EC50 (Pseudokirchneriella subcapitata (green algae)): 20 Exposure time: 72 h Test Type: static test
Chronic aquatic toxicity- As- sessment	: Harmful to aquatic life with long lasting effects.
Persistence and degradabili	ty
Components:	
56-23-5:	
Biodegradability	: anaerobic Result: Readily biodegradable. Remarks: Readily biodegradable
Bioaccumulative potential	
-	
Bioaccumulative potential <u>Components:</u> 56-23-5:	
Components:	: log Pow: 2.83 (25 °C) pH: 7
Components: 56-23-5: Partition coefficient: n-	
<b>Components:</b> 56-23-5: Partition coefficient: n- octanol/water	
Components: 56-23-5: Partition coefficient: n- octanol/water Mobility in soil	
Components: 56-23-5: Partition coefficient: n- octanol/water Mobility in soil No data available Other adverse effects	
Components: 56-23-5: Partition coefficient: n- octanol/water Mobility in soil No data available Other adverse effects Product:	рН: 7
Components: 56-23-5: Partition coefficient: n- octanol/water Mobility in soil No data available Other adverse effects	



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Components:	
56-23-5:	
Ozone-Depletion Potential	<ul> <li>1.1</li> <li>Regulation: UNEP - Handbook for the Montreal Protocol on Substances that Deplete the Ozone Layer (Update: 2009-10- 01)</li> <li>Group: Annex B - Group II: Carbon tetrachloride</li> </ul>
	1.1 Regulation: 40 CFR Protection of Environment; Part 82 Pro- tection of Stratospheric Ozone - CAA Section 602 Class I Substances (Update: 2007-07-01) Group: Group IV
Additional ecological infor- mation	: Dangerous for the ozone layer.

Toxic to aquatic life with long lasting effects.

#### SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods	
Waste from residues	<ul> <li>Dispose of in accordance with all applicable local, state and federal regulations.</li> <li>For assistance with your waste management needs - including disposal, recycling and waste stream reduction, contact Uni- var Solutions ChemCare: 1-800-637-7922</li> </ul>
Contaminated packaging	: Empty remaining contents. Dispose of as unused product. Do not re-use empty containers.

#### **SECTION 14. TRANSPORT INFORMATION**

**DOT (Department of Transportation)**: UN1897, TETRACHLOROETHYLENE, 6.1, III , Marine Pollutant (TETRACHLOROETHYLENE)

### IATA (International Air Transport Association):

UN1897, TETRACHLOROETHYLENE, 6.1, III

#### IMDG (International Maritime Dangerous Goods):

UN1897, TETRACHLOROETHYLENE, 6.1, III, Marine Pollutant (TETRACHLOROETHYLENE)

#### **SECTION 15. REGULATORY INFORMATION**

WHMIS Classification	: D2A: Very Toxic Material Causing Other Toxic Effects
	D2B: Toxic Material Causing Other Toxic Effects



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#### EPCRA - Emergency Planning and Community Right-to-Know Act

#### CERCLA Reportable Quantity

Components	CAS-No.	Component RQ	Calculated product RQ
		(lbs)	(lbs)
Tetrachloroethylene	127-18-4	100	100
Carbon tetrachloride	56-23-5	10	2222

#### SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards	:	Acute toxicity (any route of exposure) Skin corrosion or irritation Serious eye damage or eye irritation Carcinogenicity Specific target organ toxicity (single or repeated exposure)	
SARA 302	:	No chemicals in this material are subject to the reporting re- quirements of SARA Title III, Section 302.	
SARA 313	:	The following components are subject to reporting levels es- tablished by SARA Title III, Section 313:	
	-	27-18-4 6-23-5	Tetrachloroethylene Carbon tetrachloride

#### **Clean Air Act**

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 112 (40 CFR 61):

127-18-4 Tetrachloroethylene

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCMI Intermediate or Final VOC's (40 CFR 60.489):

127-18-4 Tetrachloroethylene

#### Clean Water Act

The following Hazardous Substances are listed under the U.S. CleanWater Act, Section 311, Table 116.4A: 56-23-5 Carbon tetrachloride

The following Hazardous Chemicals are listed under the U.S. CleanWater Act, Section 311, Table 117.3: 56-23-5 Carbon tetrachloride

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

#### Massachusetts Right To Know

127-18-4	Tetrachloroethylene
56-23-5	Carbon tetrachloride

#### Pennsylvania Right To Know

127-18-4	Tetrachloroethylene
56-23-5	Carbon tetrachloride

#### California Prop 65

**WARNING**: This product can expose you to chemicals including Tetrachloroethylene, Carbon tetrachloride, which is/are known to the State of California to cause cancer. For more information go to www.P65Warnings.ca.gov.

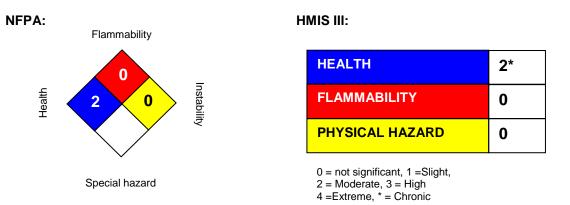


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The components of this product are reported in the following inventories:			
TSCA	: On TSCA Inventory		
DSL	: All components of this product are on the Canadian DSL		

#### SECTION16. OTHER INFORMATION



The information accumulated is based on the data of which we are aware and is believed to be correct as of the date hereof. Since this information may be applied under conditions beyond our control and with which we may be unfamiliar and since data made become available subsequently to the date hereof, we do not assume any responsibility for the results of its use. Recipients are advised to confirm in advance of need that the information is current, applicable, and suitable to their circumstances. This SDS has been prepared by Univar Solutions Product Compliance Department (1-855-429-2661) SDSNA@univarsolutions.com.

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Legacy SDS: : R0001042

#### Material number:

16144331, 16185668, 16175660, 16177884, 16175659, 16174970, 16174969, 16174619, 16176846, 16175873, 16175486, 16175385, 16175315, 16176347, 16168693, 16146630, 16162198, 16144477, 16159250, 16142203, 16143705, 16143706, 16145774, 16143704, 16144042, 16144043, 16148628, 16141544, 16141824, 16140256, 16141887, 16062193, 16056596, 16009752, 637625, 554102, 554349, 547485, 54914, 72995, 104807, 87675, 104196, 56039, 71265, 505397, 503744, 503743, 501951, 501344, 20233, 20232, 20231

Key or legend to abbreviations and acronyms used in the safety data sheet			
ACGIH	American Conference of Govern-	LD50	Lethal Dose 50%
	ment Industrial Hygienists		



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	LOAEL	Lowest Observed Adverse Effect
		Level
		National Fire Protection Agency
Canada, Non-Domestic Substanc-	NIOSH	National Institute for Occupational
es List		Safety & Health
Central Nervous System	NTP	National Toxicology Program
Chemical Abstract Service	NZIoC	New Zealand Inventory of Chemi-
		cals
Effective Concentration	NOAEL	No Observable Adverse Effect
		Level
Effective Concentration 50%	NOEC	No Observed Effect Concentration
EOSCA Generic Exposure Scenar-	OSHA	Occupational Safety & Health
io Tool		Administration
European Oilfield Specialty Chem-	PEL	Permissible Exposure Limit
icals Association		
European Inventory of Existing	PICCS	Philippines Inventory of Commer-
Chemical Substances		cial Chemical Substances
Germany Maximum Concentration	PRNT	Presumed Not Toxic
Values		
Globally Harmonized System	RCRA	Resource Conservation Recovery
		Act
Greater Than or Equal To	STEL	Short-term Exposure Limit
Inhibition Concentration 50%	SARA	Superfund Amendments and
		Reauthorization Act.
International Agency for Research	TLV	Threshold Limit Value
on Cancer		
Inventory of Existing Chemical	TWA	Time Weighted Average
Substances in China		
Japan, Inventory of Existing and	TSCA	Toxic Substance Control Act
New Chemical Substances		
Korea, Existing Chemical Inventory	UVCB	Unknown or Variable Composi-
		tion, Complex Reaction Products,
		and Biological Materials
Less Than or Equal To	WHMIS	Workplace Hazardous Materials
		Information System
Lethal Concentration 50%		
	es List Central Nervous System Chemical Abstract Service Effective Concentration Effective Concentration 50% EOSCA Generic Exposure Scenar- io Tool European Oilfield Specialty Chem- icals Association European Inventory of Existing Chemical Substances Germany Maximum Concentration Values Globally Harmonized System Greater Than or Equal To Inhibition Concentration 50% International Agency for Research on Cancer Inventory of Existing Chemical Substances in China Japan, Inventory of Existing and New Chemical Substances Korea, Existing Chemical Inventory Less Than or Equal To	SubstancesCanada, Domestic Substances ListNFPACanada, Non-Domestic SubstancesNIOSHes ListNTPChemical Nervous SystemNTPChemical Abstract ServiceNZIoCEffective ConcentrationNOAELEffective Concentration 50%NOECEOSCA Generic Exposure Scenario ToolOSHAEuropean Oilfield Specialty Chemicals AssociationPELEuropean Inventory of Existing Chemical SubstancesPICCSGermany Maximum Concentration ValuesPRNTGlobally Harmonized SystemRCRAInternational Agency for Research on CancerTLVInventory of Existing Chemical SubstancesTWAJapan, Inventory of Existing and New Chemical SubstancesTSCAKorea, Existing Chemical InventoryUVCBLess Than or Equal ToWHMIS