1. Identification

1.1. Product identifier

Trade name: R-5 RED CONCENTRATE

1.2. Recommended use of the chemical and restrictions on use

Relevant applications identified: Industrial Use

1.3. Details of the supplier of the safety data sheet

Company: United Initiators, Inc.
334 Phillips 311 Rd.
Helena, AR 72342-9033
USA

Telephone: 870-572-2935

Telefax: 870-572-1416

Email address: Cs-initiators.nafta@united-in.com

1.4. 24 HOUR EMERGENCY TELEPHONE NUMBERS:

CHEMTREC - US & CANADA: 800-424-9300

CHEMTREC INTERNATIONAL: +1 703-527-3887 **(collect calls accepted)**

Product Regulatory Services : 800-231-2702

2. Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation 29CFR 1910.1200

Flammable liquids	Category 3	H226
Skin irritation	Category 2	H315
Eye irritation	Category 2A	H319
Reproductive toxicity	Category 2	H361
Specific target organ toxicity - single exposure (Respiratory system)	Category 3	H335
Specific target organ toxicity - repeated exposure	Category 2	H373
Aspiration hazard	Category 1	H304
Acute aquatic toxicity	Category 2	H401

2.2. Label elements

Statutory basis: Classification according to Regulation 29CFR 1910.1200

hazard-defining component(s) (GHS)

- 2-Naphthalenol ((phenylazo) phenyl) azo alkyl derivatives
- Xylene
- ethylbenzene

Symbol(s)

Signal word: Danger

Hazard statement:
H226 - Flammable liquid and vapour.
H304 - May be fatal if swallowed and enters airways.
H315 - Causes skin irritation.
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation.
H361 - Suspected of damaging fertility or the unborn child.
H373 - May cause damage to organs through prolonged or repeated exposure.
H401 - Toxic to aquatic life.

Precautionary statement: Prevention
P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P210 - Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P233 - Keep container tightly closed.
P240 - Ground/bond container and receiving equipment.
P241 - Use explosion-proof electrical/ ventilating/ lighting/ equipment.
P242 - Use only non-sparking tools.
P243 - Take precautionary measures against static discharge.
P260 - Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.
P264 - Wash skin thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/ eye protection/ face protection.
P281 - Use personal protective equipment as required.

Precautionary statement: Reaction
P301 + P310 - IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P304 + P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position 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.
P331 - Do NOT induce vomiting.
P332 + P313 - If skin irritation occurs: Get medical advice/ attention.
P337 + P313 - If eye irritation persists: Get medical advice/ attention.
P362 - Take off contaminated clothing and wash before reuse.
P370 + P378 - In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Precautionary statement: Storage
P403 + P233 - Store in a well-ventilated place. Keep container tightly closed.
P403 + P235 - Store in a well-ventilated place. Keep cool.
P405 - Store locked up.

Precautionary statement: Disposal
P501 - Dispose of contents/ container to an approved waste disposal plant.

2.3. Other hazards

None known.

3. Composition/information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

• Dimethyl phthalate 45%	
CAS-No. 131-11-3	
Acute Tox. 4 (Inhalation: vapours)	Category 4
• 2-Naphthalenol ((phenylazo) phenyl) azo alkyl derivatives >= 30%	
CAS-No. 92257-31-3	
Reproductive toxicity	Category 2
• Xylene 19%	
CAS-No. 1330-20-7	
Flammable liquids	Category 3
Skin irritation	Category 2
Eye irritation	Category 2A
Specific target organ toxicity - single exposure (Respiratory system)	Category 3
Specific target organ toxicity - repeated exposure	Category 2
Aspiration hazard	Category 1
Acute aquatic toxicity	Category 1
• ethylbenzene 3.5%	
CAS-No. 100-41-4	
Flammable liquids	Category 2
Acute toxicity (Inhalation)	Category 4
Skin irritation	Category 2
Eye irritation	Category 2A
Specific target organ toxicity - single exposure (Respiratory system)	Category 3
Specific target organ toxicity - repeated exposure	Category 2
Aspiration hazard	Category 1
Acute aquatic toxicity	Category 2
Chronic aquatic toxicity	Category 3
• 1,3-Benzenediol, 2,4-bis[(alkylphenyl) azo-] <= 3%	
CAS-No. 29190-28-1	
Eye irritation	Category 2A

4. First aid measures

4.1. Description of first aid measures

General advice
Take off contaminated clothing immediately.
Pay attention to self-protection.
Move out of dangerous area.
Keep warm, position comfortably, and cover well.
Do not leave affected persons unattended.

Inhalation
Remove to fresh air.
If feeling unwell seek medical advice.
Place patients at risk of losing consciousness in stabilized lateral position; artificial respiration as required
Monitor breathing, seek medical advice immediately.

Skin contact
Wash skin thoroughly with soap and water or use recognized skin cleanser.
Consult a doctor in the event of permanent skin irritation.

Eye contact
Rinse thoroughly with plenty of water, also under the eyelids.
See an eye specialist immediately.

Ingestion
Do not induce vomiting and seek medical advice immediately.
Keep respiratory tract clear.

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

Symptoms
Inhalation may provoke the following symptoms:
headache
Drowsiness
Daze
unconsciousness
Dry skin.

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

Continue with first aid measures.
Depending on the pathology and clinical findings, patient monitoring and symptomatic treatment are necessary.

5. Fire-fighting measures

5.1. Extinguishing media

Suitable extinguishing media: foam, water spray, CO2, dry powder
Unsuitable extinguishing media: High volume water jet

5.2. Special hazards arising from the substance or mixture

Combustible liquid. Vapors can travel to a source of ignition and flash back. Explosive mixtures may occur at temperatures at or above the flashpoint.
May be released in case of fire: carbon monoxide, carbon dioxide, organic products of decomposition.
Under certain fire conditions, traces of other toxic products may occur.
Cool closed containers exposed to fire with water spray.
Closed container may rupture if strongly heated.

5.3. Advice for firefighters

As in any fire, wear self-contained positive-pressure breathing apparatus, (MSHA/NIOSH approved or equivalent) and full protective gear.
Containers exposed to heat (fire) may build up pressure. Cool by splashing with water.
Also keep emptied containers away from sources of heat and ignition.
Have ready/wear respiratory protection equipment.

6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protective equipment. Do not breathe vapours or spray mist. Ensure adequate ventilation.
Keep away from sources of ignition - No smoking.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.Obey relevant local, state, provincial and federal laws and regulations. Do not contaminate any lakes, streams, rivers, groundwater or soil.

6.3. Methods and material for containment and cleaning up

Take up mechanically or with an absorbent material. Fill into marked, sealable containers. To be disposed of in compliance with existing regulations.

Suitable binder: sand, diatomaceous earth, universal absorbent

Additional advice
Assure sufficient ventilation.
Vapours may form explosive mixtures with air.

Remove sources of ignition and ventilate area.
Run off may create fire or explosion hazard in sewer.

7. Handling and storage

7.1. Precautions for safe handling

Provide good ventilation or extraction. Avoid contact with skin, eyes and clothing. All metal parts of the mixing and processing equipment must be earthed. Do not empty into drains. Do not breathe in vapours, aerosols, sprays. Wash hands before breaks and at the end of workday. Remove contaminated or saturated clothing. Keep away from heat, sparks, flames and other sources of ignition. Keep container tightly closed. Use only with adequate ventilation.
Vapors may spread long distances and travel to areas away from the work site before igniting or flashing back to the vapor source.
Wear personal protective equipment; see section 8.

7.2. Conditions for safe storage, including any incompatibilities

Advice on protection against fire and explosion
Take precautionary measures against static discharges.
Keep away from sources of ignition - No smoking.
This material may have a low electrical conductivity and therefore may accumulate dangerous levels of static electricity. An ignitable vapor-air mixture can form inside storage tanks.

The user must be sure to dissipate static charge by careful bonding and grounding of all equipment and personnel involved in fluid transfer with continuity checks to prove effectiveness. Additional precautions against fire and explosion are the use of inert gas to purge vapor space; dip-pipes while filling vessels, especially lined vessels; grounded tank level floats; reduced flow velocity; self-closing valves on transfer lines and flame arrestors in vent lines.

Additional guidance on fire and explosion protection may be found in various consensus standards, including NFPA 30, 69 and 77 and API 2003 as well as OSHA regulation 29CFR1910.106.

Follow all MSDS/label precautions even after container is emptied because it may retain product residues.

Storage
Keep containers tightly closed in a cool, well-ventilated place.

Storage stability
Stable under recommended storage conditions.

8. Exposure controls/personal protection

8.1. Control parameters

• **Dimethyl phthalate**		
CAS-No.	131-11-3	
Control parameters	5 mg/m3	Time Weighted Average (TWA):(ACGIH)
Control parameters	5 mg/m3	Permissible exposure limit:(OSHA Z1)
Control parameters	5 mg/m3	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):(US CA OEL)

• **Xylene**		
CAS-No. Control parameters	1330-20-7 100 ppm 435 mg/m3	Permissible exposure limit:(OSHA Z1)
Control parameters	100 ppm	Time Weighted Average (TWA):(ACGIH)
Control parameters	150 ppm	Short Term Exposure Limit (STEL):(ACGIH)
Control parameters	100 ppm 435 mg/m3	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):(US CA OEL)
Control parameters	300 ppm	Ceiling Limit Value:(US CA OEL)
Control parameters	150 ppm 655 mg/m3	Short Term Exposure Limit (STEL):(US CA OEL)
• **ethylbenzene**		
CAS-No. Control parameters	100-41-4 20 ppm	Time Weighted Average (TWA):(ACGIH)
Control parameters	100 ppm 435 mg/m3	Permissible exposure limit:(OSHA Z1)
Control parameters	5 ppm 22 mg/m3	Time Weighted Average (TWA) Permissible Exposure Limit (PEL):(US CA OEL)
Control parameters	30 ppm 130 mg/m3	Short Term Exposure Limit (STEL):(US CA OEL)

8.2. Exposure controls

Engineering measures

Provide good ventilation or extraction.
Use this product preferably in a closed system, or use process enclosures, local exhaust ventilation or other engineering controls to minimize airborne exposure.

8.3. Personal protective equipment

Respiratory protection

In case of dusts/vapours/aerosols being formed or if the limit values like TLV are exceeded:
Respirator with brown A-type filter
or
wear a self contained respiratory apparatus
Note time limit for wearing respiratory protective equipment.
A respiratory protection program that meets OSHA 1910.134 and ANSI Z88.2 or applicable federal/provincial requirements must be followed whenever workplace conditions warrant respirator use.
NIOSH's "Respirator Decision Logic" may be useful in determining the suitability of various types of respirators.

Hand protection

The following details refer to information provided by Kächele-Cama Latex GmbH, Am Kreuzacker 9, D-36124 Eichenzell, www.kcl.de, which supplies the corresponding protective gloves.

Glove material	nitrile rubber (Camatril Velours)
Material thickness	0.4 mm
Break through time	> 480 min
Method	DIN EN 374

The above mentioned hand protection is based on knowledge of the chemistry and anticipated uses of this product but it may not be appropriate for all workplaces. A hazard assessment should be conducted prior to use to ensure suitability of gloves for specific work environments and processes prior to use.
Use impermeable gloves.

Eye protection
Safety glasses with side-shields

Skin and body protection
A safety shower and eye wash fountain should be readily available.
To identify additional Personal Protective Equipment (PPE) requirements, it is recommended that a hazard assessment in accordance with the OSHA PPE Standard (29CFR1910.132) be conducted before using this product.

Hygiene measures
Do not eat, drink or smoke while working. Wash hands, and/or face before breaks and when workday is finished.
Avoid clothing from being contaminated with the product. Wash contaminated clothing after use.
Apply adequate skin protection agents before handling the product. Assure skin cleaning and skin care after work. Preventive skin protection is recommended.

9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

physical state	liquid
Colour	Intensely red
Form	liquid
Odour	slightly aromatic
Odour Threshold	not determined
pH	Not applicable
Melting point/range	no data available
Boiling point/range	138 °C
Flash point	> 37 °C
Evaporation rate	9.5
Flammability (solid, gas)	no data available
Lower explosion limit	1 %(V)
Upper explosion limit	7 %(V)
Vapour pressure	5 mmHg (65 °C)
Relative vapour density	> 1
Relative density	1.1
Water solubility	insoluble
Partition coefficient: n-octanol/water	No data available Not required by safety or application considerations.
Autoignition temperature	No data available

Thermal decomposition	No data available
Viscosity, dynamic	No data available
Viscosity, kinematic	no data available

9.2. Other information

no data available

10. Stability and reactivity

10.1. Reactivity
Under normal conditions: stable.

10.2. Chemical stability
Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions
Possibility of hazardous reactions: No dangerous reaction known under conditions of normal use.

10.4. Conditions to avoid
Keep away from heat and sources of ignition.

10.5. Incompatible materials
oxidizing agents, alkalis., Aluminium

10.6. Hazardous decomposition products
Decomposition products in combustion, chemical or thermal decomposition
carbon monoxide, carbon dioxide, toxic gases/vapours

11. Toxicological information

11.1. Information on toxicological effects

Toxicological information on components
Dimethyl phthalate

Acute oral toxicity	LD50 Oral Rat: 8200 mg/kg
Acute inhalation toxicity	LC50 : 10.4 mg/l / 6 h Assessment: H332: Harmful if inhaled.
Acute dermal toxicity	LD50 Dermal Rat: > 12000 mg/kg
Skin irritation	No skin irritation
Eye irritation	No eye irritation
Sensitization	Not sensitizing.

2-Naphthalenol ((phenylazo) phenyl) azo alkyl derivatives

Acute oral toxicity	LD50 Oral Rat: > 5000 mg/kg

Skin irritation	No skin irritation

CMR assessment

Toxicity to reproduction	Some evidence of adverse effects on development, based on animal experiments.

Xylene

Acute oral toxicity	LD50 Rat: 3523 mg/kg
Acute inhalation toxicity	LD50 Rat: 27.5 mg/l / 4 h / vapour
Acute dermal toxicity	LD50 Rabbit: > 4200 mg/kg
Skin irritation	Skin irritation
Eye irritation	Irritating to eyes.
Assessment of STOT single exposure	Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.
Assessment of STOT repeat exposure	Assessment: The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.
Risk of aspiration toxicity	May be fatal if swallowed and enters airways.
Teratogenicity	Suppliers of xylene have reported that high levels of exposure to xylene in some laboratory animal studies were reported to have affected the development of the embryo/fetus. These effects were often at levels toxic to the mother. The significance of this to human exposure has not been determined. inhalative Rat: in maternally non-toxic doses NOAEL (No Observed Adverse Effect Level) teratogenesis: 2.165 mg/l Method: OECD TG 414 Suppliers of xylene have reported that high levels of exposure to xylene in some animal studies were reported to have affected the development of the embryo/fetus. These effects were often at levels which are toxic to the mother. The significance of these findings to human exposure has not been determined, particularly the exposure to the low levels of xylene found in this product.
teratogenicity assessment	Potential embryo-foetal toxicity and teratogenicity.
Further information	Overexposure to xylene has been suggested as a cause of the following effects in laboratory animals and may aggravate pre-existing disorders of these organs in humans: kidney damage; mild, reversible liver effects; effects on hearing and cardiac sensitization.

ethylbenzene

Acute oral toxicity	LD50 Rat: 3500 mg/kg
Acute inhalation toxicity	LC50 Rat: 17.6 mg/l / 4 h / vapour

Acute dermal toxicity	LD50 Rabbit: 15400 mg/kg LD50 Rabbit: 5000 mg/kg
Skin irritation	Skin irritation
Eye irritation	Irritating to eyes.
Sensitization	Does not cause skin sensitisation.
Assessment of STOT single exposure	Assessment: The substance or mixture is classified as specific target organ toxicant, single exposure, category 3 with respiratory tract irritation.
Assessment of STOT repeat exposure	Assessment: The substance or mixture is classified as specific target organ toxicant, repeated exposure, category 2.
Risk of aspiration toxicity	May be fatal if swallowed and enters airways.
carcinogenicity assessment	Contains a component which is classified as an IARC 2B carcinogen (possibly carcinogenic to humans).

1,3-Benzenediol, 2,4-bis[(alkylphenyl) azo-]

12. Ecological information

12.1. Toxicity

Toxicity to fish: no data available

12.2. Persistence and degradability

Biodegradability: no data available

12.3. Bioaccumulative potential

Bioaccumulation: no data available

12.4. Mobility in soil

Mobility: No data available

12.5. Other adverse effects

Further Information: Do not allow to enter waste water drains, watercourse or soil.

13. Disposal considerations

13.1. Waste treatment methods

Product

Waste must be disposed of in accordance with federal, state and local regulations. Incineration is the preferred method of disposal. Contact United Initiators for additional information. Empty containers must be handled with care due to product residue. DO NOT HEAT OR CUT THE EMPTY CONTAINER WITH ELECTRIC OR GAS TORCH.

Uncleaned packaging
Packaging material should be recycled or disposed of in accordance with federal, state and local regulations.

14. Transport information

D.O.T. Road/Rail

14.1.	UN number:	NA 1993
14.2.	UN proper shipping name:	Combustible Liquid, n.o.s.(Xylene)
14.3.	Transport hazard class(es):	3
14.4.	Packing group:	III
14.5.	Environmental hazards (Marine pollutant):	--
14.6.	Special precautions for user:	No

Air transport ICAO-TI/IATA-DGR

14.1.	UN number:	UN 1993
14.2.	UN proper shipping name:	Flammable liquid, n.o.s.(Xylene)
14.3.	Transport hazard class(es):	3
14.4.	Packing group:	III
14.5.	Environmental hazards:	--
14.6.	Special precautions for user:	Yes
	IATA-C: ERG-Code 3L	
	IATA-P: ERG-Code 3L	

Sea transport IMDG-Code/GGVSee (Germany)

14.1.	UN number:	UN 1993
14.2.	UN proper shipping name:	FLAMMABLE LIQUID, N.O.S.(Xylene)
14.3.	Transport hazard class(es):	3
14.4.	Packing group:	III
14.5.	Environmental hazards (Marine pollutant):	--
14.6.	Special precautions for user:	No
	EmS:	F-E,S-E

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code:
for transportapproval see regulatory information

15. Regulatory information

US Federal Regulations

OSHA

If listed below, chemical specific standards apply to the product or components:

- None listed

Clean Air Act Section (112)

If listed below, components present at or above the de minimus level are hazardous air pollutants:

- Dimethyl phthalate
  CAS-No. 131-11-3
- Xylene
  1330-20-7
- ethylbenzene
  100-41-4

CERCLA Reportable Quantities

If listed below, a reportable quantity (RQ) applies to the product based on the percent of the named component:

- Xylene
  CAS-No. 1330-20-7
  Reportable Quantity 526 lbs
- ethylbenzene
  CAS-No. 100-41-4
  Reportable Quantity 28571 lbs

SARA Title III Section 311/312 Hazard Categories

The product meets the criteria only for the listed hazard classes:

- Acute Health Hazard
- Chronic Health Hazard

SARA Title III Section 313 Reportable Substances

If listed below, components are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

- Dimethyl phthalate
  CAS-No. 131-11-3
- Xylene
  CAS-No. 1330-20-7
- ethylbenzene
  CAS-No. 100-41-4

Toxic Substances Control Act (TSCA)

If listed below, non-proprietary substances are subject to export notification under Section 12 (b) of TSCA:

- None listed

State Regulations

California Proposition 65

A warning under the California Drinking Water Act is required only if listed below:

WARNING! This product contains a chemical known to the State of California to cause cancer.

- ethylbenzene
  CAS-No. 100-41-4

International Chemical Inventory Status

Unless otherwise noted, this product is in compliance with the inventory listing of the countries shown below. For information on listing for countries not shown, contact the Product Regulatory Services Department.

• Europe (EINECS/ELINCS)	listed/registered
• USA (TSCA)	listed/registered
• Canada (NDSL)	listed/registered
• Australia (AICS)	not listed/registered
• Japan (MITI)	not listed/registered
• Philippines (PICCS)	listed/registered
• China	listed/registered
• Korea	listed/registered
• New Zealand	listed/registered

An employer using HMIS/NFPA labeling must through training ensure that its employees are fully aware of the hazards of the chemicals used.

HMIS Ratings

Health :	2*
Flammability :	3
Physical Hazard :	0

NFPA Ratings

Health :	2
Flammability :	3
Reactivity :	0

16. Other information

Further information

Revision date 03/02/2015

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

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.

Legend

ACC	American Chemistry Council
ACGIH	American Conference of Governmental Industrial Hygenists
ACS	Advisory Committee on Sustainability
ADI	Acceptable Daily Intake
ASTM	American Society for Testing and Materials
ATP	Adaptation to Technical Progress
BCF	Bioconcentration factor
BOD	Biochemical oxygen demand
c.c.	closed cup
CAO	Cargo Aircraft Only
Carc	Carcinogen
CAS	Chemical Abstract Services
CDN	Canada
CEPA	Canadian Environmental Protection Act
CERCLA	Comprehensive Environmental Response – Compensation and Liability Act
CFR	Code of Federal Regulations
CMR	carcinogenic-mutagenic-toxic for reproduction
COD	Chemical oxygen demand
DIN	German Institute for Standardization
DMEL	Derived minimum effect level
DNEL	Derived no effect level
DOT	Department of Transportation
EC50	half maximal effective concentration
EPA	Environmental Protection Agency
ErC50	Reduction of Growth Rate
ERG	Emergency Response Guide Book
FDA	Food and Drug Administration
GHS	Globally Harmonized System of Classification and Labelling of Chemicals (GHS)
GLP	Good Laboratory Practice
GMO	Genetic Modified Organism
HCS	Hazard Communication Standard
HMIS	Hazardous Materials Identification System
IARC	International Agency for Research on Cancer
IATA	International Air Transport Association
IBC	Intermediate Bulk Container
ICAO-TI	International Civil Aviation Organization- Technical Instructions
ICCA	International Council of Chemical Association
ID	Identification number
IMDG	International Maritime Dangerous Goods
IUPAC	International Union of Pure and Applied Chemistry
ISO	International Organization For Standardization
LC50	50 % Lethal Concentration
LD50	50 % Lethal Dose
L(E)C50	LC50 or EC50
LOAEL	Lowest observed adverse effect level
LOEL	Lowest observed effect level
MARPOL	International Convention for the Prevention of Pollution from Ships
NFPA	National Fire Protection Association
NOAEL	No observed adverse effect level
NOEC	no observed effect concentration
NOEL	no observed effect level
o. c.	open cup
OECD	Organisation for Economic Cooperation and Development
OEL	Occupational Exposure Limit
OSHA	Occupational Safety and Health Administration
PBT	Persistent, bioaccumulative, toxic
PEC	Predicted effect concentration
PNEC	Predicted no effect concentration
RQ	Reportable Quantity
SDS	Safety Data Sheet
STOT	Specific Target Organ Toxicity
UN	United Nations
vPvB	very persistent, very bioaccumulative
voc	volatile organic compounds

WHMIS	Workplace Hazardous Materials Information System
WHO	World Health Organization