

ASHLAND®		Page: 1
SAFETY DATA SHEET		Revision Date: 05/21/2015
		Print Date: 4/1/2016
		SDS Number: R0718146
Vincience / Xyleine™ KS biofunctional ™ Trademark, Ashland or its subsidiaries, registered in various countries 832511		Version: 1.0

29 CFR 1910.1200 (OSHA HazCom 2012)

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product identifier

Trade name : Vincience / Xyleine™ KS
biofunctional
™ Trademark, Ashland or its subsidiaries, registered in
various countries

Recommended use of the chemical and restrictions on use

Use of the Substance/Mixture : Personal care

Details of the supplier of the safety data sheet Ashland P.O. Box 2219 Columbus, OH 43216 United States of America EHS Customer Requests@ashland.com	Emergency telephone number 1-800-ASHLAND (1-800-274-5263) Regulatory Information Number 1-800-325-3751 Product Information 614-790-3333
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SECTION 2. HAZARDS IDENTIFICATION

GHS Classification


Skin irritation : Category 2

Respiratory sensitization : Category 1

Skin sensitization : Category 1

Aspiration hazard : Category 1

GHS Label element

Hazard pictograms : 

Signal Word : Danger

Hazard Statements : May be fatal if swallowed and enters airways.
Causes skin irritation.
May cause an allergic skin reaction.
May cause allergy or asthma symptoms or breathing difficulties

ASHLAND®		Page: 2
SAFETY DATA SHEET		Revision Date: 05/21/2015
		Print Date: 4/1/2016
		SDS Number: R0718146
Vincience / Xyleine™ KS biofunctional ™ Trademark, Ashland or its subsidiaries, registered in various countries 832511		Version: 1.0

if inhaled.

Precautionary Statements

: Prevention:

Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.

Wash skin thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

Wear protective gloves.

In case of inadequate ventilation wear respiratory protection.

Response:

IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.

IF ON SKIN: Wash with plenty of soap and water.

IF INHALED: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

Do NOT induce vomiting.

If skin irritation or rash occurs: Get medical advice/ attention.

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/ physician.

Take off contaminated clothing and wash before reuse.

Storage:

Store locked up.

Disposal:

Dispose of contents/ container to an approved waste disposal plant.

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture

: Mixture

Hazardous components

Chemical Name	CAS-No.	Classification	Concentration (%)
CITRUS MEDICA LIMONUM JUICE EXTRACT	84929-31-7	Flam. Liq. 3; H226 Skin Irrit. 2; H315 Skin Sens. 1; H317 Asp. Tox. 1; H304	15.00
PAPAIN	9001-73-4	Resp. Sens. 1; H334	2.30

ASHLAND®		Page: 3
SAFETY DATA SHEET		Revision Date: 05/21/2015
		Print Date: 4/1/2016
		SDS Number: R0718146
Vincience / Xyleine™ KS biofunctional ™ Trademark, Ashland or its subsidiaries, registered in various countries 832511		Version: 1.0

SECTION 4. FIRST AID MEASURES

- | | |
|---|---|
| General advice | : Move out of dangerous area.
Show this safety data sheet to the doctor in attendance.
Symptoms of poisoning may appear several hours later.
Do not leave the victim unattended. |
| If inhaled | : Move to fresh air.
Call a physician or poison control centre immediately.
Keep patient warm and at rest.
If unconscious place in recovery position and seek medical advice. |
| In case of skin contact | : Remove contaminated clothing. If irritation develops, get medical attention.
If on skin, rinse well with water.
Wash contaminated clothing before re-use. |
| In case of eye contact | : Flush eyes with water as a precaution.
Remove contact lenses.
Protect unharmed eye.
If eye irritation persists, consult a specialist. |
| If swallowed | : Obtain medical attention.
Do NOT induce vomiting.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician. |
| Most important symptoms and effects, both acute and delayed | : Signs and symptoms of exposure to this material through breathing, swallowing, and/or passage of the material through the skin may include:
irritation (nose, throat, airways)
May be fatal if swallowed and enters airways.
Causes skin irritation.
May cause an allergic skin reaction.
May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| Notes to physician | : No hazards which require special first aid measures. |

SECTION 5. FIREFIGHTING MEASURES

- | | |
|------------------------------|--|
| Suitable extinguishing media | : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Water spray
Foam |
|------------------------------|--|

ASHLAND®		Page: 4
SAFETY DATA SHEET		Revision Date: 05/21/2015
		Print Date: 4/1/2016
		SDS Number: R0718146
Vincience / Xyleine™ KS biofunctional ™ Trademark, Ashland or its subsidiaries, registered in various countries 832511		Version: 1.0

Carbon dioxide (CO₂)
Dry chemical

- Unsuitable extinguishing media : High volume water jet
- Specific hazards during firefighting : Do not allow run-off from fire fighting to enter drains or water courses.
- Hazardous combustion products : carbon dioxide and carbon monoxide
Hydrocarbons
Carbon oxides
- Specific extinguishing methods :
- Product is compatible with standard fire-fighting agents.
- Further information : Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
- Special protective equipment for firefighters : In the event of fire, wear self-contained breathing apparatus.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.
Ensure adequate ventilation.
Persons not wearing protective equipment should be excluded from area of spill until clean-up has been completed.
- 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 : Keep in suitable, closed containers for disposal.
- Other information : Comply with all applicable federal, state, and local regulations.

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Avoid formation of aerosol.
Provide sufficient air exchange and/or exhaust in work rooms.
Do not breathe vapours/dust.
Do not smoke.
Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not

ASHLAND®		Page: 5
SAFETY DATA SHEET		Revision Date: 05/21/2015
		Print Date: 4/1/2016
		SDS Number: R0718146
Vincience / Xyleine™ KS biofunctional ™ Trademark, Ashland or its subsidiaries, registered in various countries 832511		Version: 1.0

be employed in any process in which this mixture is being used.

Container hazardous when empty.

Avoid exposure - obtain special instructions before use.

Avoid contact with skin and eyes.

Smoking, eating and drinking should be prohibited in the application area.

For personal protection see section 8.

Dispose of rinse water in accordance with local and national regulations.

Conditions for safe storage : Keep container tightly closed in a dry and well-ventilated place.
Containers which are opened must be carefully resealed and kept upright to prevent leakage.
Observe label precautions.
Electrical installations / working materials must comply with the technological safety standards.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

Engineering measures : Provide sufficient mechanical (general and/or local exhaust) ventilation to maintain exposure below exposure guidelines (if applicable) or below levels that cause known, suspected or apparent adverse effects.

Personal protective equipment

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

A NIOSH-approved air-purifying respirator with an appropriate cartridge and/or filter may be permissible under certain circumstances where airborne concentrations are expected to exceed exposure limits (if applicable) or if overexposure has otherwise been determined. Protection provided by air-purifying respirators is limited. Use a positive pressure, air-supplied respirator if there is any potential for uncontrolled release, exposure levels are not known or any other circumstances where an air-purifying respirator may not provide adequate protection.

Hand protection
Remarks

: The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection

: Not required under normal conditions of use. Wear splash-proof safety goggles if material could be misted or splashed

ASHLAND®		Page: 6
SAFETY DATA SHEET		Revision Date: 05/21/2015
		Print Date: 4/1/2016
		SDS Number: R0718146
Vincience / Xyleine™ KS biofunctional ™ Trademark, Ashland or its subsidiaries, registered in various countries 832511		Version: 1.0

into eyes.

- Skin and body protection : Wear as appropriate:
impervious clothing
Safety shoes
Choose body protection according to the amount and
concentration of the dangerous substance at the work place.
Discard gloves that show tears, pinholes, or signs of wear.
Wear resistant gloves (consult your safety equipment
supplier).
- Hygiene measures : Wash hands before breaks and at the end of workday.
When using do not eat or drink.
When using do not smoke.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : Viscous liquid
- Physical state : liquid
- Colour : yellow, amber
- Odour : characteristic
- Odour Threshold : No data available
- pH : 5.5 - 6.5
- Melting point/freezing point : No data available
- Boiling point/boiling range : No data available
- Flash point : Not applicable
- Evaporation rate : No data available
- Flammability (solid, gas) : No data available
- Upper explosion limit : No data available
- Lower explosion limit : No data available
- Vapour pressure : No data available
- Relative vapour density : No data available
- Relative density : No data available
- Density : 1.1 - 1.3 g/cm3
- Solubility(ies)

ASHLAND®		Page: 7
SAFETY DATA SHEET		Revision Date: 05/21/2015
		Print Date: 4/1/2016
		SDS Number: R0718146
Vincience / Xyleine™ KS biofunctional ™ Trademark, Ashland or its subsidiaries, registered in various countries 832511		Version: 1.0

Water solubility : completely soluble

Solubility in other solvents : No data available

Partition coefficient: n-octanol/water : No data available

Thermal decomposition : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : No data available

Oxidizing properties : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : Stable under recommended storage conditions.

Possibility of hazardous reactions : Product will not undergo hazardous polymerization.

Conditions to avoid : excessive heat

Incompatible materials : None known.
oxidizers
Strong oxidizing agents

Hazardous decomposition products : carbon dioxide and carbon monoxide

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure : Inhalation
Skin contact
Eye Contact
Ingestion

Acute toxicity

Not classified based on available information.

Components:

CITRUS MEDICA LIMONUM JUICE EXTRACT:

Acute oral toxicity : LD 50 (Rat): > 5,000 mg/kg

Acute dermal toxicity : LD50 (Rabbit): > 5,000 mg/kg

ASHLAND®		Page: 8
SAFETY DATA SHEET		Revision Date: 05/21/2015
		Print Date: 4/1/2016
		SDS Number: R0718146
Vincience / Xyleine™ KS biofunctional ™ Trademark, Ashland or its subsidiaries, registered in various countries 832511		Version: 1.0

Skin corrosion/irritation

Causes skin irritation.

Product:

Remarks: May cause skin irritation and/or dermatitis.

Components:

CITRUS MEDICA LIMONUM JUICE EXTRACT:

Species: Rabbit

Result: Irritating to skin

PAPAIN:

Result: Not irritating to skin

Serious eye damage/eye irritation

Not classified based on available information.

Product:

Remarks: Vapours may cause irritation to the eyes, respiratory system and the skin.

Components:

CITRUS MEDICA LIMONUM JUICE EXTRACT:

Species: Rabbit

Result: Mildly irritating to eyes

PAPAIN:

Result: Not irritating to eyes

Respiratory or skin sensitisation

Skin sensitisation: May cause an allergic skin reaction.

Respiratory sensitisation: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Components:

CITRUS MEDICA LIMONUM JUICE EXTRACT:

Species: Mouse

Assessment: May cause sensitisation by skin contact.

Method: OECD Test Guideline 429

PAPAIN:

Assessment: May cause sensitization by inhalation.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

May be fatal if swallowed and enters airways.

Product:

ASHLAND®		Page: 9
SAFETY DATA SHEET		Revision Date: 05/21/2015
		Print Date: 4/1/2016
		SDS Number: R0718146
Vincience / Xyleine™ KS biofunctional ™ Trademark, Ashland or its subsidiaries, registered in various countries 832511		Version: 1.0

May be fatal if swallowed and enters airways.

Components:

CITRUS MEDICA LIMONUM JUICE EXTRACT:

The substance or mixture is known to cause human aspiration toxicity hazards or has to be regarded as if it causes a human aspiration toxicity hazard.

Further information

Product:

Remarks: Solvents may degrease the skin.

Carcinogenicity:

IARC

No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA

No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

NTP

No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

CITRUS MEDICA LIMONUM JUICE EXTRACT:

Toxicity to fish : LC 50 (Fish): 0.3 mg/l
Exposure time: 96 h

Toxicity to daphnia and other : EC 50 (Daphnia (water flea)): 0.313 mg/l
aquatic invertebrates Exposure time: 48 h

Toxicity to algae : EC 50 (Green algae): 0.523 mg/l
Exposure time: 96 h

Persistence and degradability

Components:

CITRUS MEDICA LIMONUM JUICE EXTRACT:

Biodegradability : Remarks: Readily biodegradable

Bioaccumulative potential

Components:

CITRUS MEDICA LIMONUM JUICE EXTRACT:

ASHLAND®		Page: 10
SAFETY DATA SHEET		Revision Date: 05/21/2015
		Print Date: 4/1/2016
		SDS Number: R0718146
Vincience / Xyleine™ KS biofunctional ™ Trademark, Ashland or its subsidiaries, registered in various countries 832511		Version: 1.0

Partition coefficient: n- : Pow: 3.33 - 6.3
octanol/water

Mobility in soil

Components:

No data available

Other adverse effects

No data available

Product:

Additional ecological : An environmental hazard cannot be excluded in the event of
information unprofessional handling or disposal., Toxic to aquatic life with
long lasting effects.

Components:

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

General advice : The product should not be allowed to enter drains, water
courses or the soil.
Do not contaminate ponds, waterways or ditches with
chemical or used container.
Send to a licensed waste management company.

Dispose of in accordance with all applicable local, state and
federal regulations.

Contaminated packaging : Empty remaining contents.
Dispose of as unused product.
Empty containers should be taken to an approved waste
handling site for recycling or disposal.
Do not re-use empty containers.

SECTION 14. TRANSPORT INFORMATION

International transport regulations

REGULATION

ID NUMBER	PROPER SHIPPING NAME	*HAZARD CLASS	SUBSIDIARY HAZARDS	PACKING GROUP	MARINE POLLUTANT / LTD. QTY.

U.S. DOT - ROAD

UN	3082	Environmentally hazardous substance, liquid, n.o.s. (CITRUS MEDICA LIMONUM JUICE EXTRACT)	9	III	

ASHLAND®		Page: 11
SAFETY DATA SHEET		Revision Date: 05/21/2015
		Print Date: 4/1/2016
		SDS Number: R0718146
Vincience / Xyleine™ KS biofunctional ™ Trademark, Ashland or its subsidiaries, registered in various countries 832511		Version: 1.0

U.S. DOT - RAIL

UN	3082	Environmentally hazardous substance, liquid, n.o.s. (CITRUS MEDICA LIMONUM JUICE EXTRACT)	9	III

U.S. DOT - INLAND WATERWAYS

UN	3082	Environmentally hazardous substance, liquid, n.o.s. (CITRUS MEDICA LIMONUM JUICE EXTRACT)	9	III

TRANSPORT CANADA - ROAD

UN	3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CITRUS MEDICA LIMONUM JUICE EXTRACT)	9	III

TRANSPORT CANADA - RAIL

UN	3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CITRUS MEDICA LIMONUM JUICE EXTRACT)	9	III

TRANSPORT CANADA - INLAND WATERWAYS

UN	3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CITRUS MEDICA LIMONUM JUICE EXTRACT)	9	III

INTERNATIONAL MARITIME DANGEROUS GOODS

UN	3082	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (CITRUS MEDICA LIMONUM JUICE EXTRACT)	9	III	MARINE POLLUTANT:(CITRUS MEDICA LIMONUM JUICE EXTRACT)

INTERNATIONAL AIR TRANSPORT ASSOCIATION - CARGO

ASHLAND®		Page: 12
SAFETY DATA SHEET		Revision Date: 05/21/2015
		Print Date: 4/1/2016
		SDS Number: R0718146
Vincience / Xyleine™ KS biofunctional ™ Trademark, Ashland or its subsidiaries, registered in various countries 832511		Version: 1.0

UN	3082	Environmentally hazardous substance, liquid, n.o.s. (CITRUS MEDICA LIMONUM JUICE EXTRACT)	9	III
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INTERNATIONAL AIR TRANSPORT ASSOCIATION - PASSENGER

UN	3082	Environmentally hazardous substance, liquid, n.o.s. (CITRUS MEDICA LIMONUM JUICE EXTRACT)	9	III
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MEXICAN REGULATION FOR THE LAND TRANSPORT OF HAZARDOUS MATERIALS AND WASTES

UN	3082	SUSTANCIA LIQUIDA POTENCIALMENTE PELIGROSAS PARA EL MEDIO AMBIENTE, N.E.P. (CITRUS MEDICA LIMONUM JUICE EXTRACT)	9	III
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*ORM = ORM-D, CBL = COMBUSTIBLE LIQUID

Marine pollutant	yes
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Dangerous goods descriptions (if indicated above) may not reflect quantity, end-use or region-specific exceptions that can be applied. Consult shipping documents for descriptions that are specific to the shipment.

SECTION 15. REGULATORY INFORMATION

SARA 311/312 Hazards : Acute Health Hazard

SARA 313 Component(s) : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Pennsylvania Right To Know

XYLITOL	87-99-0	50.00 - 70.00 %
WATER	7732-18-5	30.00 - 50.00 %
CITRUS MEDICA LIMONUM JUICE EXTRACT	84929-31-7	10.00 - 20.00 %
Olea europaea extract	84012-27-1	1.00 - 5.00 %

ASHLAND®		Page: 13
SAFETY DATA SHEET		Revision Date: 05/21/2015
		Print Date: 4/1/2016
		SDS Number: R0718146
Vincience / Xyleine™ KS biofunctional ™ Trademark, Ashland or its subsidiaries, registered in various countries 832511		Version: 1.0

New Jersey Right To Know

XYLITOL	87-99-0	50.00 - 70.00 %
WATER	7732-18-5	30.00 - 50.00 %
CITRUS MEDICA LIMONUM JUICE EXTRACT	84929-31-7	10.00 - 20.00 %
Olea europaea extract	84012-27-1	1.00 - 5.00 %
PAPAIN	9001-73-4	1.00 - 5.00 %

California Prop 65

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

The components of this product are reported in the following inventories:

TSCA	: This product is regulated under the United States Food and Drug Act (FDA).
DSL	: This product contains the following components listed on the Canadian NDSL. All other components are on the Canadian DSL.
AUSTR	: Not in compliance with the inventory
ENCS	: Not in compliance with the inventory
KECL	: Not in compliance with the inventory
PICCS	: Not in compliance with the inventory
IECSC	: On the inventory, or in compliance with the inventory

Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TSCA (USA)

ASHLAND®		Page: 14
SAFETY DATA SHEET		Revision Date: 05/21/2015
		Print Date: 4/1/2016
		SDS Number: R0718146
Vincience / Xyleine™ KS biofunctional ™ Trademark, Ashland or its subsidiaries, registered in various countries 832511		Version: 1.0

SECTION 16. OTHER INFORMATION

Further information

Revision Date: 05/21/2015

NFPA:	HMIS III:						
<p>Flammability</p> <p>Health</p> <p>Instability</p> <p>Special hazard.</p>	<table border="1"> <tr> <td>HEALTH</td><td></td></tr> <tr> <td>FLAMMABILITY</td><td></td></tr> <tr> <td>PHYSICAL HAZARD</td><td></td></tr> </table> <p>0 = not significant, 1 = Slight, 2 = Moderate, 3 = High 4 = Extreme, * = Chronic</p>	HEALTH		FLAMMABILITY		PHYSICAL HAZARD	
HEALTH							
FLAMMABILITY							
PHYSICAL HAZARD							

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

H226	Flammable liquid and vapor.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.

Sources of key data used to compile the Safety Data Sheet

Ashland internal data including own and sponsored test reports

The UNECE administers regional agreements implementing harmonised classification for labelling (GHS) and transport.

The information accumulated herein is believed to be accurate but is not warranted to be whether originating with the company or not. 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 Ashland's Environmental Health and Safety Department (1-800-325-3751).

List of abbreviations and acronyms that could be, but not necessarily are, used in this safety data sheet :

ACGIH : American Conference of Industrial Hygienists

BEI : Biological Exposure Index

CAS : Chemical Abstracts Service (Division of the American Chemical Society).

CMR : Carcinogenic, Mutagenic or Toxic for Reproduction

FG : Food grade

GHS : Globally Harmonized System of Classification and Labeling of Chemicals.

H-statement : Hazard Statement

IATA : International Air Transport Association.

ASHLAND®		Page: 15
SAFETY DATA SHEET		Revision Date: 05/21/2015
		Print Date: 4/1/2016
		SDS Number: R0718146
Vincience / Xyleine™ KS biofunctional ™ Trademark, Ashland or its subsidiaries, registered in various countries 832511		Version: 1.0

IATA-DGR : Dangerous Goods Regulation by the “International Air Transport Association” (IATA).

ICAO : International Civil Aviation Organization

ICAO-TI (ICAO) : Technical Instructions by the “International Civil Aviation Organization”

IMDG : International Maritime Code for Dangerous Goods

ISO : International Organization for Standardization

logPow : octanol-water partition coefficient

LCxx : Lethal Concentration, for xx percent of test population

LDxx : Lethal Dose, for xx percent of test population.

ICxx : Inhibitory Concentration for xx of a substance

Ecxx : Effective Concentration of xx

N.O.S.: Not Otherwise Specified

OECD : Organization for Economic Co-operation and Development

OEL : Occupational Exposure Limit

P-Statement : Precautionary Statement

PBT : Persistent , Bioaccumulative and Toxic

PPE : Personal Protective Equipment

STEL : Short-term exposure limit

STOT : Specific Target Organ Toxicity

TLV : Threshold Limit Value

TWA : Time-weighted average

vPvB : Very Persistent and Very Bioaccumulative

WEL : Workplace Exposure Level

CERCLA : Comprehensive Environmental Response, Compensation, and Liability Act

DOT : Department of Transportation

FIFRA : Federal Insecticide, Fungicide, and Rodenticide Act

HMIRC : Hazardous Materials Information Review Commission

HMIS : Hazardous Materials Identification System

NFPA : National Fire Protection Association

NIOSH : National Institute for Occupational Safety and Health

OSHA : Occupational Safety and Health Administration

PMRA : Health Canada Pest Management Regulatory Agency

RTK : Right to Know

WHMIS : Workplace Hazardous Materials Information System