Material Safety Data Sheet

Weyerhaeuser

Creosote Treated Parallam PSL

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1. Product Identification

Product	Manufacturing Location(s)
Creosote Pressure Treated Parallam® PSL	**USA:** Buckhannon WV **Canada:** Vancouver, BC

Synonyms: Creosote Pressure Treated Parallel Strand Lumber; Creosote Pressure Treated Wood; Creosote Pressure Treated Structural Composite Lumber.

2. Hazardous Ingredients/Identity Information

Name	CAS#	Percent	Agency	Exposure Limits	Comments
Wood (wood dust, hardwood and softwood)	None	68-77	OSHA	PEL-TWA 15 mg/m^3 (see footnote [A] below)	Total dust
			OSHA	PEL-TWA 5 mg/m^3 (see footnote [A] below)	Respirable dust fraction
			ACGIH	TLV-TWA 1 mg/m^3	Inhalable fraction
Phenol - formaldehyde resin/wax solids [B]	9003-35-4	7-8	OSHA	PEL-TWA 0.75 ppm	Free gaseous formaldehyde
			OSHA	PEL-STEL 2 ppm	Free gaseous formaldehyde
			ACGIH	TLV-Ceiling 0.3 ppm	Free gaseous formaldehyde
Creosote [C]	8001-58-9	16-24 [C]	OSHA	PEL-TWA 0.2 mg/m^3	Coal tar pitch volatiles (benzene soluble fraction)
			ACGIH	TLV-TWA 0.2 mg/m^3	Coal tar pitch volatiles (benzene soluble aerosol)

[A] In AFL-CIO v OSHA, 965 F. 2d 962 (11th Cir. 1992), the Court overturned OSHA's 1989 Air Contaminants Rule, including the specific PEL's for wood dust that OSHA had established at that time. The 1989 vacated PEL's were: 5 mg/m^3 PEL-TWA and 10 mg/m^3 STEL (15 min), all softwood and hardwood except Western Red Cedar. Wood dust is now regulated by OSHA as "Particulates Not Otherwise Regulated" (PNOR), which is also referred to as "nuisance dust". However, some states have incorporated the 1989 OSHA PEL's in their state plans. Additionally, OSHA indicated that it may cite employers under the OSH Act general duty clause in appropriate circumstances for noncompliance with the 1989 PEL's.

2. Hazardous Ingredients/Identity Information (cont'd.)

[B] These products may contain free formaldehyde (<0.1%, wt %), which may be released depending on concentration and environmental conditions. These products contain no added urea-formaldehyde resins. Large scale chamber studies conducted by the APA Engineered Wood Association on panel materials using similar manufacturing processes and adhesives as Creosote Pressure Treated Parallam® PSL have shown that the finished products should off-gas levels below 0.1 ppm as well.

[C] Based on treatment at a level of 8-12 pounds creosote/ft^3 of wood. This is the average percentage. Specific percentages may vary due to difference in wood stock species being treated.

3. Hazard Identification

Primary Safety/Health Hazards: Creosote Pressure Treated Parallam® PSL dust may pose a combustible dust explosion hazard if suspended in air in sufficient concentrations and in proximity to an ignition source. Users of this product should examine the potential to generate wood dust during handling and processing and related combustibility hazards and controls. See additional comments in MSDS. The primary health hazards posed by this product are thought to be due to contact of the treating chemical with unprotected skin and secondarily by inhalation of treated or untreated wood dust.

Appearance and Odor: Creosote treated hardwood (yellow poplar) and softwood (southern pine and Douglas fir) is dark brown in color with a fuel-oil odor.

Primary Route(s) of Exposure:

- ☐ Ingestion:
- ☒ Skin: Wood dust, creosote
- ☒ Inhalation: Wood dust, creosote, formaldehyde if present
- ☒ Eye: Wood dust, creosote, formaldehyde if present

Medical Conditions Generally Aggravated by Exposure: Wood dust and formaldehyde may aggravate pre-existing respiratory conditions or allergies. Creosote may aggravate pre-existing eye, skin or respiratory problems.

Signs and Symptoms of Exposure:

Acute Health Hazards: Wood dust can cause eye irritation. Certain species of wood dust can elicit allergic contact dermatitis in sensitized individuals. Wood dust may cause respiratory irritation, nasal dryness, coughing, sneezing, and wheezing as a result of inhalation. Transfer of creosote preservative to skin can result in irritation which, when accentuated by sunlight, may result in a phototoxic skin reaction. Creosote vapor may cause respiratory tract irritation. If exposed in an enclosed space, creosote vapors may produce headache, drowsiness, and possible weakness and lack of coordination. Formaldehyde may cause temporary irritation of skin, eyes, or respiratory system. Formaldehyde may cause sensitization in susceptible individuals.

Chronic Health Hazards: Wood dust, depending on the species, may cause allergic contact dermatitis and respiratory sensitization with prolonged, repetitive contact or exposure to elevated dust levels. Prolonged exposure to wood dust has been reported by some observers to be associated with nasal cancer. Repeated and prolonged contact with creosote may cause conjunctivitis, or allergic dermatitis. Animal studies have also shown creosote to cause skin cancer.

Carcinogenicity Listing:

- ☒ NTP: Wood dust: *Known to be a Human Carcinogen.* Creosote is not listed specifically by NTP; however, creosote is derived from coal tar and coal tar pitches which are NTP listed carcinogens. Formaldehyde: *Reasonably Anticipated to be a Human Carcinogen.*
- ☒ IARC Monographs: Wood dust: Group 1 – *Carcinogenic to humans*. Creosote: Group 2A – *Probably carcinogenic to humans*. Formaldehyde: Group 1 – *Carcinogenic to humans*.
- ☒ OSHA Regulated: Formaldehyde gas

3. Hazard Identification (cont'd.)

Wood Dust - NTP:

According to its Report on Carcinogens, Eleventh Edition, NTP states, "Wood dust is known to be a human carcinogen based on sufficient evidence of carcinogenicity from studies in humans". An association between wood dust exposure and cancer of the nasal cavity has been observed in many case reports, cohort studies, and case-control studies that specifically addressed nasal cancer. Strong and consistent associations with cancer of the nasal cavities and paranasal sinuses were observed both in studies of people whose occupations are associated with wood dust exposure and in studies that directly estimated wood dust exposure. This classification is based primarily on increased risk in the occurrence of adenocarcinomas of the nasal cavities and paranasal sinuses associated with exposure to wood dust. The evaluation did not find sufficient evidence to associate cancers of the oropharynx, hypopharynx, lung,
lymphatic and hematopoietic systems, stomach, colon or rectum with exposure to wood dust. There is inadequate evidence for the carcinogenicity of wood dust from studies in experimental animals according to NTP.

Wood Dust: IARC – Group 1: Carcinogenic to humans; sufficient evidence of carcinogenicity. This classification is primarily based on studies showing an association between occupational exposure to wood dust and adenocarcinoma of the nasal cavities and paranasal sinuses. IARC did not find sufficient evidence of an association between occupational exposure to wood dust and cancers of the oropharynx, hypopharynx, lung, lymphatic and hematopoietic systems, stomach, colon or rectum.

Creosote: IARC – Group 2A: (Probably Carcinogenic to Humans. Sufficient evidence in animals, limited evidence in humans.)

Formaldehyde: IARC – Group 1: Carcinogenic to humans, sufficient evidence of carcinogenicity. A working group of IARC has determined that there is sufficient evidence that formaldehyde causes nasopharyngeal cancer in humans, a rare cancer in developed countries and "strong but not sufficient evidence" for leukemia. However, numerous epidemiological studies have failed to demonstrate a relationship between formaldehyde exposure and nasal cancer or pulmonary diseases such as emphysema or lung cancer.

4. Emergency and First-Aid Procedures

Ingestion: Not applicable under normal use.

Eye Contact: Treated wood dust may cause mechanical irritation. Creosote vapor, liquid and formaldehyde if present may cause tearing or burning sensation. Remove from exposure and treat dust in eye as foreign object. Flush with water to remove dust particles. Seek medical help if irritation persists.

Skin Contact: Treated wood dust of certain species can elicit allergic contact dermatitis in sensitized individuals, as well as mechanical irritation resulting in erythema and hives. Creosote will irritate the skin, which is accentuated by sunlight and can lead to phototoxic skin reactions in sensitive individuals. Remove from exposure and sunlight and wash affected areas with plenty of soap and water. Remove and clean contaminated clothing. Seek medical help if rash, irritation or dermatitis persists.

Skin Absorption: Creosote may be absorbed through the skin.

Inhalation: Wood dust may cause unpleasant obstruction in the nasal passages, resulting in dryness of nose, dry cough, sneezing and headaches. Creosote vapor may cause respiratory difficulties and central nervous system effects characterized by headache, drowsiness, weakness and lack of coordination. Formaldehyde if present may cause upper respiratory tract irritation. Remove to fresh air. Seek medical help if persistent irritation, severe coughing or breathing difficulty occurs.

Note to Physician: None

5. Fire and Explosion Data

Flash Point (Method Used): NAP
Flammable Limits: **LFL =** NAP **UFL =** NAP
Extinguishing Media: Water, carbon dioxide, sand
Autoignition Temperature: Wood portion of the product may ignite at temperatures in excess of 400°F (204°C). Creosote will ignite at temperatures in excess of 311°F (155°C).
Special Firefighting Procedures: Toxic coal tar smoke and fume will be released. Use SCBA and complete turn-out gear while fighting fire. Use water to wet down wood dust to reduce the likelihood of ignition or dispersion of dust into the air. Remove burned, charred or wet dust to open, secure area after fire is extinguished.
Unusual Fire and Explosion Hazards: Depending on moisture content, and more importantly, particle diameter and airborne concentration, wood dust in a contained area may explode in the presence of an ignition source. Wood dust may similarly deflagrate (combustion without detonation like an explosion) if ignited in an open or loosely contained area. An airborne concentration of 40 grams (40,000 mg) of dust per cubic meter of air is often used as the LEL for wood dusts. Reference NFPA Standards 654 and 664 for guidance. Ventilation systems should be kept clean and precautions should be taken to prevent sparks or other ignition sources.

HMIS Rating (Scale 0-4):	**Health =**	2*	**Fire =**	1	**Physical Hazard =**	0
NFPA Rating (Scale 0-4):	**Health =**	2	**Fire =**	1	**Reactivity =**	0

6. Accidental Release Measures

Steps to be Taken In Case Material Is Released or Spilled: wood dust may pose a combustible dust hazard. Keep away from ignition sources. Wear protective gloves (viton, butyl nitrile rubber, butyl/neoprene or neoprene) when handling product. See section 8 below. Wood dust may be vacuumed or shoveled for recovery or disposal. Avoid dusty conditions and provide good ventilation.

7. Handling and Storage

Precautions to be Taken In Handling and Storage: Avoid repeated or prolonged breathing of treated or untreated wood dust. Use a respirator if dust is generated during handling. See section 8 below. Avoid eye contact and repeated or direct contact with unprotected skin. When storing product, the material should be kept off the ground and kept in a cool, dry place away from open flame. Avoid accumulations of wood dust and practice good housekeeping. These products may release some formaldehyde in gaseous form, especially if stored in enclosed areas with elevated temperature or moisture. Specific handling and storage conditions should be assessed to determine potential formaldehyde concentrations.

8. Exposure Control Measures, Personal Protection

Personal Protective Equipment:
RESPIRATORY PROTECTION – A NIOSH approved filtering face piece respirator (“dust mask”) is recommended when wood dust exposure limits may be exceeded, or for symptom relief or worker comfort. If creosote-related vapor levels are excessive (which is not likely), an organic vapor cartridge respirator in combination with the particulate filter is recommended. Each exposure situation should be assessed and respiratory protection should be used in accordance with regulatory requirements such as the OSHA respiratory protection standard 29 CFR 1910.134.
PROTECTIVE GLOVES – Chemical resistant gloves are recommended when handling product. Type of glove materials suitable for handling this product include: viton, butile nitrile rubber, butyl/neoprene and neoprene. Gauntlet length glove is recommended when extensive handling is expected.
EYE PROTECTION – Not applicable for product in purchased form. Goggles or safety glasses are recommended when machining this product and in areas with high dust levels.

8. Exposure Control Measures, Personal Protection (cont'd.)

OTHER PROTECTIVE CLOTHING OR EQUIPMENT – Disposable Tyvek-like outer garments may be desirable in extremely dusty areas and should be used when activity would cause unavoidable contact with skin and clothing. If preservative and/or wood dust accumulates on clothes, launder before reuse. It is recommended to launder work clothes separately from other household clothing. To protect against phototoxicity, apply a commercially available sun block agent with a Sun Protection Factor of $\geq$ 15 under barrier creams. Barrier creams applied several times during the day have been found to be beneficial for some workers in the wood treating industry.

WORK/HYGIENE PRACTICES – Follow good hygienic and housekeeping practices. It is very important to wash hands frequently. Clean up areas where treated wood dust settles to avoid excessive accumulation of this combustible material. Minimize compressed air blowdown or other practices that generate high airborne-dust concentrations.

Ventilation:

LOCAL EXHAUST – Provide local exhaust as needed so that exposure limits are met. Ventilation to control dust should be considered where potential explosive concentrations and ignition sources are present. The design and operation of any exhaust system should consider the possibility of explosive concentrations of wood dust within the system. See "SPECIAL" section below. Use of tool mounted exhaust systems should also be considered, especially when working in enclosed areas.

MECHANICAL (GENERAL) – Provide general ventilation in processing and storage areas so that exposure limits are met.

SPECIAL – Ensure that exhaust ventilation and material transport systems involved in handling this product contain explosion relief vents or suppression systems designed and operated in accordance with applicable standards if the operating conditions justify their use.

OTHER – Cutting & Machining of product should preferably be done outdoors or with adequate ventilation & containment.

9. Physical/Chemical Properties

Physical Description: Creosote treated hardwood (yellow poplar) and softwood (southern pine and Douglas fir) is dark brown in color with a fuel-oil odor.

Boiling Point (@ 760 mm Hg):	NAP
Evaporation Rate (Butyl Acetate = 1):	NAP
Freezing Point:	NAP
Melting Point:	NAP
Molecular Formula:	NAP
Molecular Weight:	NAP
Oil-water Distribution Coefficient:	NAP
Odor Threshold:	NAP
pH:	NAP
Solubility in Water (% by weight):	Insoluble
Specific Gravity (H_2O = 1):	Variable; depends on wood species and moisture
Vapor Density (air = 1; 1 atm):	NAP
Vapor Pressure (mm Hg):	NAP
Viscosity:	NAP
% Volatile by Volume [@ 70°F (21°C)]:	NAV

10. Stability and Reactivity

Stability: ☐ Unstable ☒ Stable

Conditions to Avoid: Avoid open flame. Wood portion of the product may ignite at temperatures in excess of 400°F (204°C). Creosote will ignite at temperatures in excess of 311°F (155°C).

10. Stability and Reactivity (cont'd.)

Incompatibility (Materials to Avoid): Avoid contact with oxidizing agents, strong acids and drying oils.
Hazardous Decomposition or By-Products: Natural decomposition of organic materials such as wood may produce toxic gases and an oxygen deficient atmosphere in enclosed or poorly ventilated areas. Thermal decomposition products include oxides of carbon and nitrogen, as well as aliphatic aldehydes, resin acids, terpenes, and polycyclic aromatic hydrocarbons. Spontaneous and rapid hazardous decomposition will not occur.
Hazardous Polymerization: ☐ May occur ☒ Will not occur
Sensitivity to Mechanical Impact: NAP
Sensitivity to Static Discharge: NAP

11. Toxicological Information

Toxicity Data: None available for product in purchased form. Individual component information is listed below if available.
Components:
Wood dust (softwood or hardwood)
Treated wood dust generated from sawing, sanding or machining the product – may cause nasal dryness, irritation, coughing and sinusitis. NTP and IARC classify wood dust as a human carcinogen (IARC Group 1). See Section 3 above.
Creosote
Acute toxicity: LD_{Lo} (oral, cat) = 600 mg/kg. LD_{Lo} (oral, dog) = 600 mg/kg. LD_{Lo} (oral, rabbit) = 600 mg/kg. LD_{50} (oral, rat) = 725 mg/kg. LD_{50} (oral, mouse) = 433 mg/kg.
Carcinogenicity Studies: Tumorogenic Data: TD_{Lo} (skin, mouse) = 99 gm/kg/33 W-I [33 week study - dose administered intermittently]. IARC Cancer Review: Animal Sufficient Evidence. IARC Cancer Review: Human Limited Evidence. IARC probable human carcinogen (Group 2A). NTP human carcinogen. Mutation Data: Microsomal mutagenic assay using salmonella typhimurium - lowest dose. 20 micrograms per plate. Body fluid assay (rat) using salmonella typhimurium - lowest dose. 250 mg/kg.
Terotogenicity Studies: Reproductive Effects Data: TD_{Lo} (oral, rat) = 14/gm/kg (91 day study on male rats). TD_{Lo} (oral, rat) = 52416 mg/kg (91 day study administered on females prior to mating. TD_{Lo} (oral, mouse) = 131 gm/kg (91 day study on male mice).
Formaldehyde
Human inhalation TC_{Lo} of 17 mg/m^3 for 30 minutes produced eye and pulmonary results; human inhalation TC_{Lo} of 300 ug/m^3 produced nose and central nervous system results; LC_{50} (rat, inhalation) = 1,000 mg/m^3, 30 minutes; LC_{50} (mice, inhalation) = 400 mg/m^3, 2 hours. IARC classifies formaldehyde as a human carcinogen (IARC Group 1). NTP classifies formaldehyde as Reasonably Anticipated to be a Human Carcinogen. See Section 3 above
Target Organs: Eyes, skin, and respiratory system.

12. Ecological Information

Environmental Toxicity: No information available for product in purchased form. Individual component information is listed below if available.
Creosote
TL_{50} Carassius Auratus (goldfish) 3.51 ppm/24 hr (60:40) mixture of creosote and coal tar) /Conditions of bioassay not specified. TL_{50} Lepomis Macrochirus (bluegill) 4.42 ppm/24 hr (60:40 mixture of creosote and coal tar) /Conditions of bioassay not specified. TL_{50} Salmo Gairdneri (rainbow trout) 3.72 ppm/24 hr (60:40 mixture of creosote and coal tar) /Conditions of bioassay not specified. LD_{50} Colinus Virginianus (bob white quail) 1,260 ppm/8 days (60:40 mixture of creosote and coal tar)

12. Ecological Information (cont'd.)

Formaldehyde

96 hr LC_{50} Fathead Minnow	24 mg/L
96 hr LC_{50} Bluegill	0.10 mg/L
5 min EC_{50} Photobacterium phosphoreum	9 mg/L
96 hr EC_{50} Water flea	20 mg/L

Environmental Fate: Finished product would be expected to be biodegradable.

Formaldehyde: Trace amounts of free formaldehyde may be released to the atmosphere and would be expected to be removed in the atmosphere by direct photolysis and oxidation by photochemically produced hydroxyl radicals (half-life of a few hours). In the aqueous phase formaldehyde biodegradation is expected to take place in a few days.

13. Disposal Considerations

Waste Disposal Method: In most states, creosote treated wood may be disposed of in an ordinary landfill. However, local and provincial requirements may require pre-treatment. Check local disposal requirements in your area prior to land filling.

CAUTION: Do not burn treated wood in open fires, stoves, fireplaces, or residential boilers because toxic chemicals may be produced in the smoke and ash. Treated wood from commercial or industrial use (for example, construction sites) may be burned only in commercial or industrial incinerators or boilers in accordance with federal, state, and local regulations. Do not use treated wood as a compost or mulch.

14. Transport Information

Mode: (Air, Land, water) Not regulated as a hazardous material by the U.S. Department of Transportation. Not listed as a hazardous material in Canadian Transportation of Dangerous Goods (TDG) regulations.

Proper Shipping Name:	NAP
Hazard Class:	NAP
UN/NA ID Number:	NAP
Packing Group:	NAP
Information Reported for Product/Size:	NAP

15. Regulatory Information

TSCA: The following ingredients are on the TSCA chemical substance inventory: formaldehyde and creosote

CERCLA: Formaldehyde (100lbs RQ) is on the CERCLA chemical substance inventory.

DSL: The following ingredients are listed under the Canadian Domestic Substance List: formaldehyde and creosote

OSHA: Wood products are not hazardous under the criteria of the federal OSHA Hazard Communication Standard 29 CFR 1910.1200. However, creosote vapors from this product and wood dust generated by sawing, sanding or machining this product may be considered hazardous. Workplace exposure to formaldehyde is specifically regulated under 29 CFR, 1910.1048.

15. Regulatory Information (cont'd.)

STATE RIGHT-TO-KNOW:

California Prop 65 – This product contains creosote and formaldehyde, which depending on temperature and humidity, may be emitted from the product. Weyerhaeuser has evaluated formaldehyde emission rates from its products and have found these rates to be below the significant risk level. The user should determine whether formaldehyde and creosote emissions resulting from its site specific use, handling, ventilation design, capacity and final construction design for this product could exceed the safe harbor levels.

Warning: Drilling, sawing, sanding or machining wood products generates wood dust, a substance known to the State of California to cause cancer.

Other State Information:

New Jersey – This product contains formaldehyde which, depending on temperature and humidity, may be emitted from the product. When cut or otherwise machined, the product may emit wood dust. Formaldehyde, wood dust, and creosote each appear on New Jersey's – Hazardous Substance List.

Pennsylvania – This product contains formaldehyde which, depending on temperature and humidity, may be emitted from the product. When cut or otherwise machined, the product may emit wood dust. Formaldehyde, wood dust, and creosote each appear on Pennsylvania's Appendix A – Hazardous Substance List.

SARA 313 Information: This product contains the following substances subject to the reporting requirements of SARA Title III Section 313 and 40 C.F.R. Part 372:
Creosote, CAS# 8001-58-9.

SARA 311/312 Hazard Category: This product as purchased has been reviewed according to the EPA "Hazard Categories" promulgated under the SARA Title III Section 311 and 312 and is considered , under applicable conditions, to meet the following categories:

An immediate (acute) health hazard	Yes
A delayed (chronic) health hazard	Yes
A corrosive hazard	No
A fire hazard	No
A reactivity hazard	No
A sudden release hazard	No

FDA: Not intended for use as a food additive or indirect food contact item.

WHMIS Classification: Controlled product: D2A (wood dust and formaldehyde: IARC Group 1; Creosote – Very Toxic Material).

16. Additional Information

Date Prepared: 08/10/2010
Date Revised: 11/05/2010
Prepared By: Weyerhaeuser Company Environment, Health, Safety and Sustainability
Weyerhaeuser MSDS available on: http://www.weyerhaeuser.com/Sustainability/MSDS

User's Responsibility: The information contained in this Material Safety Data Sheet is based on the experience of occupational health and safety professionals and comes from sources believed to be accurate or otherwise technically correct. It is the user's responsibility to determine if the product is suitable for its proposed application(s) and to follow necessary safety precautions. The user has the responsibility to make sure that this MSDS is the most up-to-date issue.

Definition of Common Terms:

ACGIH	=	American Conference of Governmental Industrial Hygienists
C	=	Ceiling Limit
CAS#	=	Chemical Abstracts System Number
DOT	=	U. S. Department of Transportation
DSL	=	Domestic Substance List

16. Additional Information (cont'd.)

EC50	=	Effective concentration that inhibits the endpoint to 50% of control population
EPA	=	U.S. Environmental Protection Agency
HMIS	=	Hazardous Materials Identification System
IARC	=	International Agency for Research on Cancer
IATA	=	International Air Transport Association
IMDG	=	International Maritime Dangerous Goods
LC50	=	Concentration in air resulting in death to 50% of experimental animals
LCLo	=	Lowest concentration in air resulting in death
LD50	=	Administered dose resulting in death to 50% of experimental animals
LDLo	=	Lowest dose resulting in death
LEL	=	Lower Explosive Limit
LFL	=	Lower Flammable Limit
MSHA	=	Mine Safety and Health Administration
NAP	=	Not Applicable
NAV	=	Not Available
NIOSH	=	National Institute for Occupational Safety and Health
NFPA	=	National Fire Protection Association
NPRI	=	Canadian National Pollution Release Inventory
NTP	=	National Toxicology Program
OSHA	=	Occupational Safety and Health Administration
PEL	=	Permissible Exposure Limit
RCRA	=	Resource Conservation and Recovery Act
STEL	=	Short-Term Exposure Limit (15 minutes)
STP	=	Standard Temperature and Pressure
TCLo	=	Lowest concentration in air resulting in a toxic effect
TDG	=	Canadian Transportation of Dangerous Goods
TDLo	=	Lowest dose resulting in a toxic effect
TLV	=	Threshold Limit Value
TSCA	=	Toxic Substance Control Act
TWA	=	Time-Weighted Average (8 hours)
UFL	=	Upper Flammable Limit
WHMIS	=	Workplace Hazardous Materials Information System