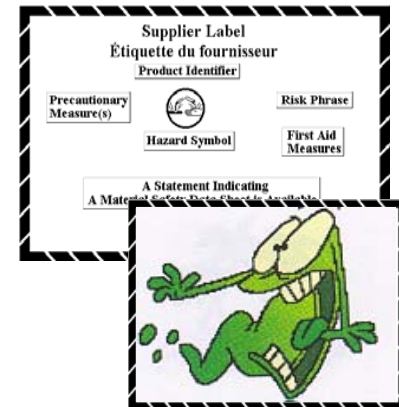


Asphalt Roofing Manufacturing Association

W H M I S



An introduction to Canada's

**Workplace Hazardous
Materials Information System
(WHMIS)**

WHMIS History

The Workplace Hazardous Materials Information System (WHMIS), implemented in 1988, is a national system to provide information on hazardous materials used in the workplace recognizing the interests of workers, employers, suppliers and regulators Balancing workers' right-to-know with industry's right to protect confidential business information.

WHMIS History

WHMIS is implemented through coordinated federal and provincial legislation. The *Hazardous Products Act* and the *Controlled Products Regulations* require suppliers of hazardous materials to provide MSDSs and label products as a conditions of sale and importation. Federal and provincial occupational safety and health legislation requires employers to provide labels, MSDSs and worker education programs in the workplace. The *Hazardous Materials Information Review Act* establishes a commission to rule on claims and appeals related to exemptions from the disclosure of confidential business information.



LEGAL RIGHTS AND DUTIES

- **W H M I S law and regulation requires you to be trained (federal and provincial)**
- **Y O U will have to know how to apply WHMIS for *every chemical* you work with, plus any that you could be exposed to**



LEGAL RIGHTS AND DUTIES

Responsibilities for Hazardous Materials



**SUPPLIERS/
MANUFACTURERS** of
hazardous materials
must...

- ✓ **C**lassify hazardous materials
- ✓ **L**abel hazardous materials
- ✓ **P**repare **M**SDS and **L**abels



LEGAL RIGHTS AND DUTIES

Responsibilities for Hazardous Materials

EMPLOYERS with
hazardous materials
are responsible for...



- ✓ **An Assessment of hazardous materials**
- ✓ **An MSDS file collection**
- ✓ **A Worker Education Program**
- ✓ **Labels on all workplace containers**



LEGAL RIGHTS AND DUTIES

*Responsibilities for
Hazardous Materials*

WORKERS using
hazardous materials
must...



- ✓ **P**articipate in **W H M I S** training
- ✓ **A P P L Y** what we learn
- ✓ **B e a w a r e o f o u r r i g h t t o:**
 - **K N O W a B O U T h a z a r d s**
 - **R e f u s e u n s a f e w o r k**
 - **C o n s u l t w i t h t h e J O I n t H e a l t h
a n d S a f e t y c o m m i t t e e**



LEGAL RIGHTS AND DUTIES

*Responsibilities for
Hazardous Materials*



WORKER EDUCATION PROGRAM for Hazardous Materials

- ✓ **Labels**
- ✓ **MSDS (Material Safety Data Sheet)**
- ✓ **How to handle, store, dispose of hazardous materials**
- ✓ **Procedures for “fugitive emissions”, e.g. fumes, dust, smoke, vapours**
- ✓ **Emergency procedures specific to workplace chemicals**
- ✓ **Apply WHMIS training on the job**
- ✓ **Review program (yearly and as changes happen)**



LEGAL RIGHTS AND DUTIES

*Responsibilities for
Hazardous Materials*



TRADE SECRET PROTECTION for Hazardous Materials

Secret formulas or preparations are protected by law from being revealed, however:

- ✓ **For WORKERS**, all hazards must be identified: you have the right to know dangers and protection controls
- ✓ **For PRODUCERS**, not all ingredients must be identified except hazards



LEGAL RIGHTS AND DUTIES

Responsibilities for Hazardous Materials



LEGAL ENFORCEMENT and PENALTIES

- ✓ **E n f o r c e m e n t o f w o r k P l a c e
h e a l t h a n d s a f e t y l a w B y t h e
O n t a r i o M i n i s t r y o f L a b o u r**
- ✓ **C o r p o r a t e f i n e s o f u p t o
\$ 5 0 0 , 0 0 0**
- ✓ **P e r s o n a l F i n e s u p t o
\$ 2 5 , 0 0 0 a n d / o r 1 2 m o n t h s
i n j a i l ***

* **a p p l i e s t o e m p l o y e r s , s u p e r v i s o r s ,
w o r k e r s**



Identify workplace hazardous materials

How do we identify hazardous materials?



- Any material named or described by regulation; **Prohibited, restricted, or controlled material**
- These materials have harmful and damaging potential
- **Containers must be labelled to warn and inform**

DEFINITIONS OF DATA COMPONENTS IN LABELS IN DIFFERENT CLASSIFICATION SYSTEMS

	EU	USA	CANADA
FORMAT	<ul style="list-style-type: none"> • Minimum label dimensions are defined for different package capacities; • contrasted danger symbols and background (black on yellow background); • language must be that of the country where the product is put on market. 	<ul style="list-style-type: none"> • none defined 	<ol style="list-style-type: none"> 1. <u>Supplier label</u>: <ul style="list-style-type: none"> • must appear on all controlled products received at work-places; required information must be set aside from sales information; surrounded by WHMIS border; must be printed in contrasting colours; must have all texts in English and French. 2. <u>Workplace label</u>: <ul style="list-style-type: none"> • must appear on all products produced in a workplace or transferred to other containers by the employer; may appear in placard form on products received in bulk.

DEFINITIONS OF DATA COMPONENTS IN LABELS IN DIFFERENT CLASSIFICATION SYSTEMS

	EU	USA	CANADA
DATA ELEMENTS	<ol style="list-style-type: none"> 1. Chemical identity 2. Hazard symbol and indication of danger. 3. Risk phrases 4. Safety phrases 5. Supplier identification (full address and tel. No.). 6. EEC number if allocated 7. the wording "EEC label" where appropriate. 	<ol style="list-style-type: none"> 1. Chemical identity 2. Supplier identification 3. Appropriate hazard warnings. <p>Employer must ensure that labels and other forms of warning are in English and may add other languages if appropriate.</p>	<ol style="list-style-type: none"> 1. <u>Supplier label:</u> <ul style="list-style-type: none"> -product identifier -supplier identification. -reference to existing CSDS. -hazard symbols; <u>and for containers over 100 ml:</u> <ul style="list-style-type: none"> -risk and safety phrases. -first aid measures 2. <u>Workplace label:</u> <ul style="list-style-type: none"> -product identifier -information for the safe handling of the products -reference to an existing CSDS. -may contain WHMIS hazard symbols or other pictograms.
OTHER REQ'MENT		ANSI Standard Z-129.1.1988 defines acceptable precautionary phrases and hazard symbols.	•Chemical name may be replaced by generic name or number in the case of products covered by provisions on exemption for confidential business information.

WATCH FOR THESE HAZARD SYMBOLS



CLASS A
Compressed Gas

CLASS D2
Materials Causing
Other
Toxic Effects



CLASS B
Flammable and
Combustible
Material

CLASS D3
Biohazardous
Infectious
Material



CLASS C
Oxidizing Material

CLASS E
Corrosive
Material



CLASS D1
Materials Causing
Immediate and
Serious
Toxic Effects

CLASS F
Dangerously
Reactive Material



Labels



Identify
workplace hazardous
materials



As **SUPPLIERS**
we must classify,
attach and
update labels



As **EMPLOYERS**
we must check, attach
and develop labels,
including workplace
labels



As **WORKERS**
we must report
condition of
labels





Identify workplace hazardous materials

SUPPLIER LABEL

- ✓ **P R O D U C T I D E N T I T Y** →
- ✓ **R I S K S** →
- ✓ **W H M I S**
- S Y M B O L S** →
- ✓ **F I R S T A I D** →
- ✓ **P R E C A U T I O N S** →
- ✓ **M S D S**
- R E F E R E N C E** →
- ✓ **P R O D U C T**
- S U P P L I E R** →

TRICHLOROETHYLENE

<p>DANGER! TOXIC</p> <p>HEALTH HAZARD: Inhalation or ingestion may cause dizziness, anesthesia and loss of consciousness. Contact with skin and eyes can cause defatting dermatitis.</p> <p>PRECAUTIONS: Wear protective equipment and clothing. Use only under well ventilated conditions. Avoid prolonged exposure. Store in cool; dry, ventilated area. Do not apply pressure to empty container. Do not add any other product to drum. Keep Container closed.</p> <p>FIRST AID: CALL A PHYSICIAN IMMEDIATELY: Skin and eyes: Flush with water for at least 15 minutes. In case of skin contact, immediately wash with soap and copious amounts of water. Wash contaminated clothing before reuse. Inhalation: Remove to fresh air. If not breathing give artificial respiration. If breathing is difficult, give oxygen. Ingestion: Do not induce vomiting</p>	<p>DANGER! TOXIQUE</p> <p>RISQUES POUR LA SANTE: L'inhalation ou ingestion peut causer des étourdissements, l'anesthésie, et la perte de conscience. Le contact avec la peau et les yeux peut causer la dermatite dégraissante.</p> <p>PRECAUTIONS: Porter un équipement et des vêtements protecteurs. Utiliser seulement dans un lieu bien ventilé. Éviter l'exposition prolongée. Entreposer dans un endroit frais, sec et bien ventilé. Ne pas appliquer de pression au contenant vide. Ne pas mettre d'autres produits dans le contenant. Garder le contenant fermé.</p> <p>PREMIERS SOINS: APPELER IMMEDIATEMENT UN MEDCIN. Peau et yeux Laver les yeux a grande eau pendant au moins 15 minutes. En cas de contact avec la peau, laver immédiatement avec du savon et une grande quantité d'eau. Laver les vêtements contaminés avant de les réutiliser. Inhalation: Déplacer la personne a l'air frais. Si la personne ne respire pas, administrer la respiration artificielle. Si la respiration est difficile, administrer de l'oxygène. Ingestion: Ne pas provoquer le vomissement.</p>
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**SEE MATERIAL SAFETY DATA SHEET FOR PRODUCT
VOIR FICHE SIGNALÉTIQUE**

**ABC Chemical Supplier Company
Anytown, Ontario Telephone 123-4567**

WORKPLACE LABEL



Identify workplace hazardous materials

- **P R O D U C T I D e n t i t y**
- **H a n d l i n g**
I n f o r m a t i o n
- **M S D S R e f e r e n c e**

TRICHLOROETHYLENE
Poisonous.
U s e i n a w e l l v e n t i l a t e d
a r e a .
D O n o t c u t o r w e l d o n , o r
n e a r t h i s c o n t a i n e r .
D O n o t B r e a t h e v a p o u r s .
R e a d t h e M S D S B e f o r e
U S I N G t h i s m a t e r i a l .

Look for the **Supplier Label**
Or the **Workplace Label**
And read the **MSDS**

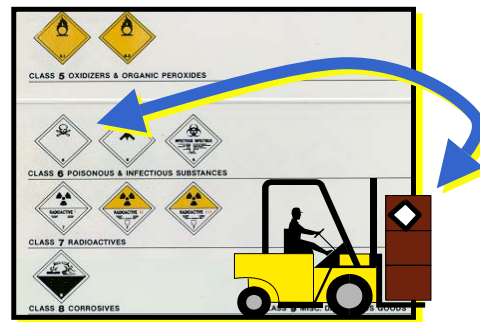
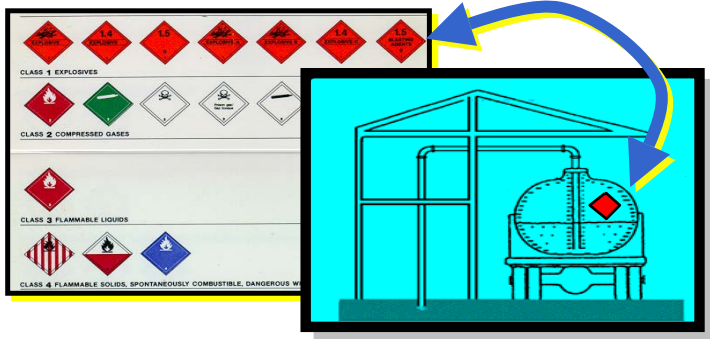


Identify workplace hazardous materials



TDG

Transportation of Dangerous Goods





Identify workplace hazardous materials



Consumer Hazardous Products



Recognize
common dangers
/ hazards

MSDS Responsibilities

As **SUPPLIERS** we
SUPPLY MSDS when we
sell, and update every 3
years or when the
material changes



As **EMPLOYERS**
we obtain MSDS
every 3 years or
up to 90 days
after a change in
the material



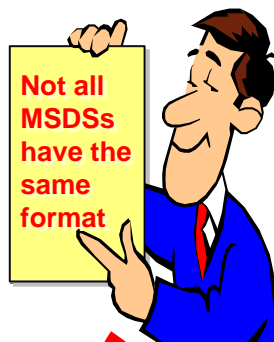
Material
Safety
Data
Sheet

As **WORKERS**
we must report
condition of
MSDS





**Recognize
common dangers
/ hazards**



MSDS Formats

**Some MSDSs have
16 sections...**

1. Chemical Product and Company Identification
2. Composition, Information on Ingredients
3. Hazards Identification
4. First Aid Measures
5. Fire Fighting Measures
6. Accidental Release Measures
7. Handling and Storage
8. Exposure Controls, Personal Protection
9. Physical and Chemical Properties
10. Stability and Reactivity
11. Toxicological Information
12. Ecological Information
13. Disposal Considerations
14. Transport Information
15. Regulatory Information
16. Other Information

**Other
MSDSs have
9 sections...**

1. Hazardous Ingredients
2. Preparation Info
3. Product Info
4. Physical Data
5. Fire/Explosion Hazard
6. Reactivity Data
7. Toxicological Properties
8. Preventive Measures
9. First Aid Measures

WHMIS Training Program Requirements

Legislation states that WHMIS training must include the following:

- **The contents required on a supplier label and workplace label, and the purpose and significance of the information contained on the labels;**
- **The contents required on a material safety data sheet and the purpose and significance of the information contained on the MSDS**
- **Procedures for the safe use, storage, handling and disposal of a controlled product;**
- **Procedures to be followed when fugitive emissions are present; and**
- **Procedures to be followed in case of an emergency involving a controlled product.**

WHMIS Training Program Requirements

The training program will provide employees with the basic knowledge required for both recognition and safe handling of hazardous materials. For a specific chemical(s) used in the workplace, the employer is to inform the worker of hazards and risks associated with that product.

While there is no expiry on the training, it is up to the employer to ensure that the WHMIS system is being applied in the workplace appropriately. Workers who may require refresher training should be given every opportunity to do so.

Questions ?

Thank You !