



Utility and limits of Safety Data Sheets



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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name : **Water**

CAS-No. : 7732-18-5

SECTION 4: First aid measures

4.1 Description of first aid measures

If inhaled

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact

Wash off with soap and plenty of water.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water.



What not to trust on SDSs

- “No hazards” or “no data”, etc.
 - Possibly (probably) didn’t look hard enough
 - Rarely-enforced regulatory requirement to do a good search to write an SDS
 - Exercise “chemical judgement” or ask someone more knowledgeable



What not to trust on SDSs

- Issues of scale
 - Storage
 - Accidental Release
 - Firefighting
 - Disposal
 - Reactivity



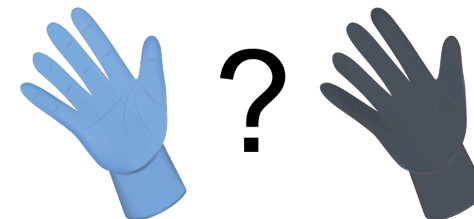
What not to trust on SDSs



- Recommendations for respiratory protection
 - Often excessive
 - Chemical fume hood provided?
 - Questions or uncertainty—
see your Industrial Hygienist

What not to trust on SDSs

- “Use appropriate gloves”
 - Often give no information
 - When given still requires verification



The SDS actually says what kinds of gloves to consider!
How refreshing!

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product Description:	<u>Oleylamine</u>
Cat No.:	129540000; 129540010; 129540050; 129540051; 129541000
Synonyms	cis-9-Octadecenylamine; 1-Amino-9-octadecene
CAS-No	112-90-3
EC-No.	204-015-5
Molecular Formula	C18 H37 N
Reach Registration Number	01-2119473797-19

Personal protective equipment

Eye Protection

Goggles (European standard - EN 166)

Hand Protection

Protective gloves

Glove material	Breakthrough time	Glove thickness	EU standard	Glove comments
Natural rubber	See manufacturers	-	EN 374	(minimum requirement)
Nitrile rubber	Recommendations			
Neoprene				
PVC				

Skin and body protection

Long sleeved clothing

Inspect gloves before use.

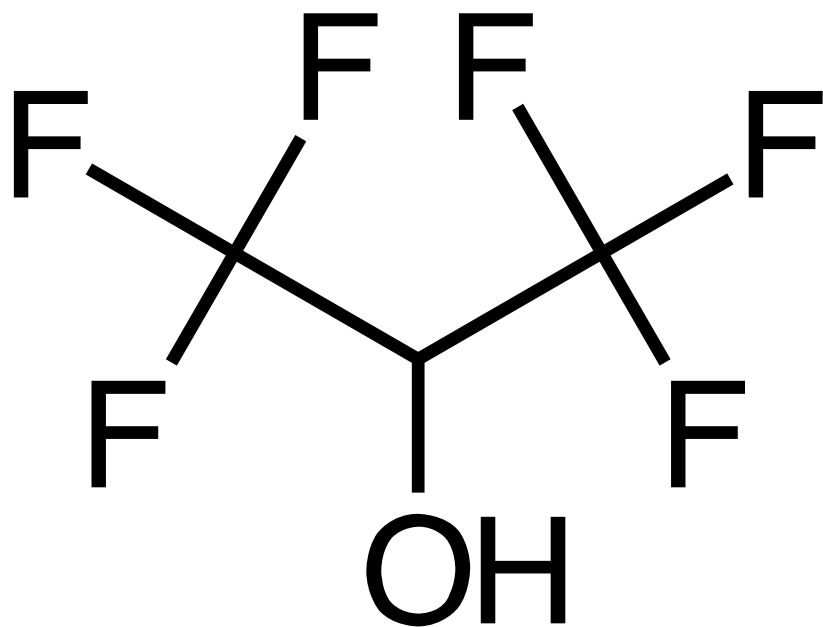
Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. (Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatibility, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

The ultimate point on SDSs

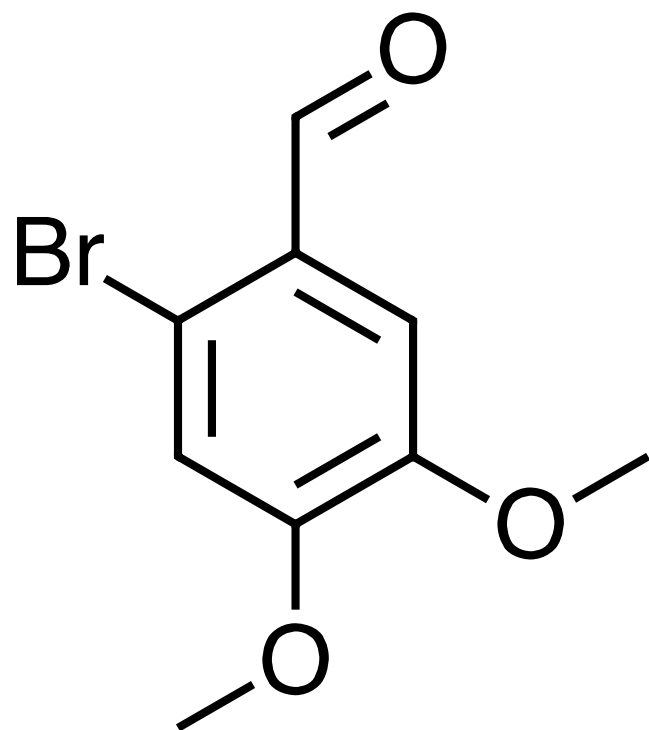
- Read more than one
- The more variation you see, the more copies you need to read
- Also: Read before experimenting, not before submitting the paper



Actual issues from SDSs

- 1,1,1,3,3,3-hexafluoro-2-propanol [CAS 920-66-1]
 - Millipore/Sigma SDS 2022-05-11 claims
 - Skin corrosion category 1A, Serious eye damage category 1, reproductive toxicity category 2, single target organ toxicity category 2 (respiratory)
 - Daikin Chemical SDS 2019-12-02 claims
 - Skin corrosion category 1A, Serious eye damage category 1
 - No other hazards (although it does say “do not breathe dusts or mists”)

Actual issues from SDSs



- 2-bromo-4,5-methoxybenzaldehyde [CAS 5392-10-9]
 - SynHet SDS 2019-10-23 claims
 - Single target organ toxicity category 3, acute toxicity category 4
 - No actual toxicity data—did they just copy from somewhere?
 - Fisher Scientific SDS 2020-02-14 claims
 - NO HAZARDS at all!
 - ChemWatch GOLD 2017-06-27
 - Lists several additional hazards
 - With sources