The Health and Safety Professionals guide to reading Safety Data Sheets.
Need Help Reading and Understanding an SDS?

Guardian Chemicals works for a better future through innovation in chemistry. Your health and safety is our primary concern. Our SDSs are prepared using first-class SDS software, up-to-date third-party chemical databases and authored by experienced Chemical Professionals. We are dedicated to compliance, research and development. If there is a safer way to manufacture, distribute and apply an industrial chemical, chances are we know about it.

Unfortunately, it has come to our attention that it is not uncommon for other suppliers to provide SDSs that are incorrect and are sometimes intentionally misleading. In fact, numerous studies have shown that a high percentage of SDSs contain factual inaccuracies, misclassified hazards and missing hazardous ingredients\(^1,2\).

We have prepared the following checklist to help you read and understand your Safety Data Sheets effectively and identify SDSs that may not be providing you with the full picture potentially putting your workers at risk. If you have further questions, regarding Safety Data Sheets or our products, call us at 1-800-661-6544.

Are you going to dilute this product?

If so, consider the potential reduction in hazard from handling the diluted product compared to the concentrate. When evaluating any SDS, it is important to remember that the SDS represents the product as supplied in concentrated form. For products that are to be diluted before use, the hazards of the diluted product are often significantly reduced and should be considered during evaluation.

Have you considered how the product will be handled in your own operation?

Will your employees be handling the product in a well-ventilated area, or will they be wearing special equipment? Are there any additional administrative or engineering controls that may be in place to reduce the hazards or requirements for PPE?
Is information on the SDS withheld for Confidential, Proprietary or Trade Secret claims?

In Canada, a Hazardous Materials Information Review Act (HMIRA) claim number is required for all confidential, proprietary and trade secret claims. Only registered claims are acceptable as Health Canada reviews the product formulation and SDS to ensure the supplier is providing accurate information to protect your workers while still protecting their confidential business information.

Suppliers typically make these claims in sections 1 or 3 of the SDS and may seek to avoid disclosure of components, CAS numbers and concentrations. In doing so, they must still disclose all proprietary ingredients of the product but may use generic chemical names that do not reveal the full chemical identity.

These claims must be filed through Health Canada and receive a HMIRA Claim Number to be valid. If no registration number is listed, the supplier may not be providing you with all the information needed to protect your workers and may be withholding hazard information that could impact your assessment and use within your operation. These unmitigated hazards could result in property damage, personal injury or worse.

You can confirm with Health Canada if your supplier has an active claim for exception under the HMIRA Act on the Health Canada website or by email: hc.whmis.claim-demande.simdut.sc@canada.ca

Examples:

1. X Supplier makes proprietary claim without supporting Health Canada HMIRA registration. The supplier may be withholding key safety information. This should be a red flag that other pertinent safety information may be missing, potentially putting your workers at risk.

<table>
<thead>
<tr>
<th>Ingredient(s)</th>
<th>% W/W</th>
<th>CAS No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Surfactant</td>
<td>10 – 30</td>
<td>Proprietary</td>
</tr>
<tr>
<td>Proprietary Solvent</td>
<td>10 – 30</td>
<td>Proprietary</td>
</tr>
</tbody>
</table>

The specific chemical identity is being withheld as a trade secret.

X Invalid propriery claims
2. **X** Supplier claims Health Canada HMIRA registration but fails to supply required hazardous ingredients listing. The supplier may be withholding key safety information. This claim would not meet the criteria of Health Canada. Even if the HMIRA Number is valid this should be a red flag that other pertinent safety information may be missing potentially putting your workers at risk.

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SECTION III: COMPOSITION/INGREDIENT INFORMATION

This product has been granted exemption on 2019-01-01. HMIRA RN: 0000000

**X** No hazardous ingredient information
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3. ✓ Supplier claims Health Canada HMIRA registration and complies with legislation.

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SECTION 3: Composition/information on ingredients

<table>
<thead>
<tr>
<th>Mixtures</th>
<th>Chemical name / Synonyms</th>
<th>Product identifier</th>
<th>Concentration (%)*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Non-Ionic Surfactant</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Alkyl aryl sulphonate (salt)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organic Oxygenated Solvent</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amino Alcohol</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Chemical name, CAS number and/or exact concentration have been withheld as a trade secret

✓ HMIRA registration and proper hazardous ingredients listing
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4. **Does the product have a flashpoint? If so, does it identify the method of testing?**

For WHMIS and TDG classification, flashpoints should be determined using a closed cup method. This would be identified as closed cup, Cleveland closed cup (CCC) or Tag closed cup (TCC).

If no method is listed, or an open cup method is used the information on the SDS may be inaccurate. It is acceptable for a supplier to list both methods, but the closed cup method must be used for classification and should be the number used when comparing products. Inaccurate flashpoints can trigger fires and explosions and have resulted in at least one workplace fatality in Alberta.

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Have you reviewed the pH of the product?

This can be found under section 9 (physical properties). Products with a pH >11.5 or <2.0 should be identified as corrosive by both WHMIS and TDG. Some suppliers misclassify corrosive products as irritants and classify the product as less hazardous than it really is. You may encounter SDSs that list pH for both the concentrate and the diluted product, it is acceptable to list both, however classification for water based products must be derived from the concentrate.

Your Partner in Environment, Health and Safety

At Guardian Chemicals, we care about your health and safety. All of our solutions are designed with you, the user in mind. This means that our products are easier to use, safer, and more environmentally responsible than the alternatives. We will not compromise when it comes to the Environment or your Health and Safety. We strive to provide you with the most accurate and reliable product information to help you make informed decisions about the products you choose and how to use them safely. If you have further questions, regarding Safety Data Sheets or our products, call us at 1-800-661-6544.