

High-Level Accessibility Evaluation (WCAG 2.1)

Knovel - RETEST

April 18, 2026

Prepared for:

BTAA-Library Accessibility Alliance

Prepared by:

Emily Mason, UX Researcher
User-Experience Lab
CCI Research & Innovation Center (RIC)
University of Tennessee
uxlab@utk.edu

Primary Point of Contact:

Amy Forrester, RIC Associate Director
aforres4@utk.edu

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SUMMARY

This report reflects the findings of a high-level assessment of the Knovel platform for its conformance with the W3C Web Content Accessibility Guidelines version 2.1 (WCAG 2.1).

Knovel has made marked accessibility improvements to the system since our last evaluation. The previous issues that were found in March 2022 have been addressed, and the database is much more navigable. However, there are a couple of minor new issues that we were able to raise with this version of the system. Below these issues are detailed to aid in improving system compliance.

Key Findings

1. **Color contrast:** There is one instance of color contrast issues on the search results page, specifically related to the gray subtext over the yellow highlight from the search/filter terms. This is an easy fix by darkening that gray color so that it will meet 4.5:1 contrast when highlighted.
2. **Nested Interactivity:** The “View All” button in the filters of the search is reading as a nested action programmatically. This is an easy fix by double checking the structure and making sure that it is not nested within another interactive element.

ACCESSIBILITY FINDINGS

This evaluation was conducted April 18, 2026 against Knovel and covers a selection of features and interfaces that were tested as a representative sample of the conformance of the tool to WCAG 2.1 AA standards.

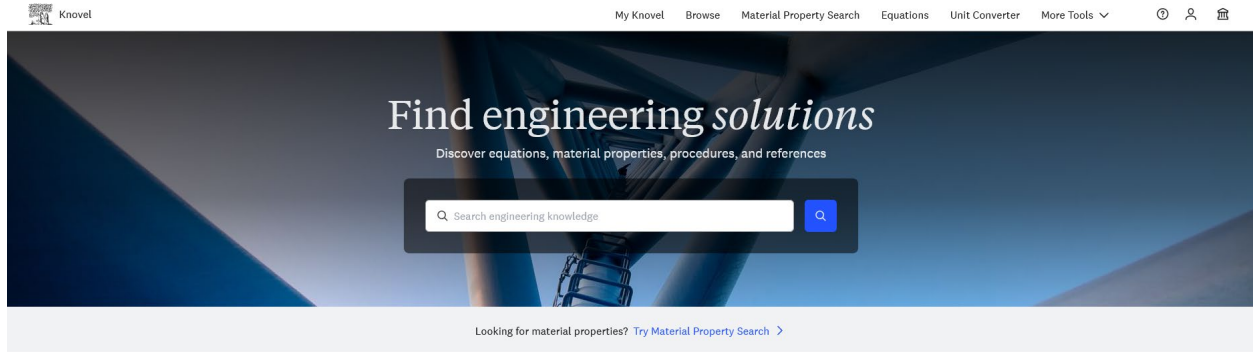
The resource was reviewed through manual analysis using the following tools:

- Colour Contrast Analyzer (CCA) v3.3.0
- NVDA v2025.1.2
- Firefox v144.0
- Chrome v141.0.7390.108
- Edge v141.0.3537.85

Below are the errors revealed during the accessibility evaluation of the Knovel platform. Each result shows a summary of accessibility issues and the reason it was flagged. Screenshots are included.




1. Initial Interface

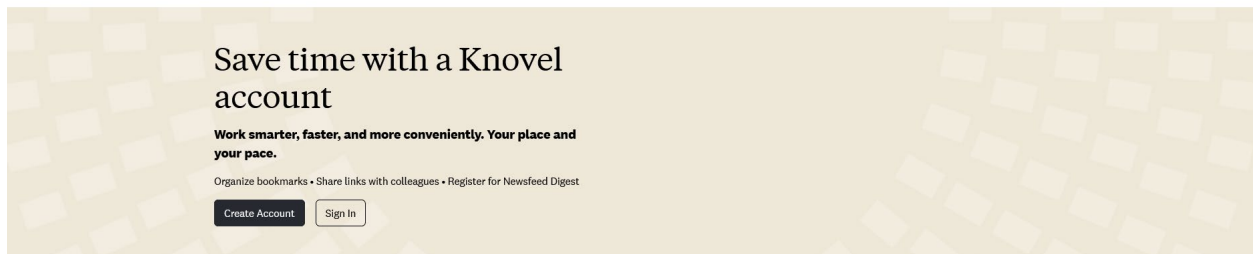
Test Case: Test initial interface/landing page to ensure menus, sub-menus, search box, images, icons, etc. are accessible.



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❖ **No accessibility violations were found.**

2. Search Results

Test Case: From the initial landing page, conduct a search for: “Benzene.” Test search results page, including filters/refine search. Filter by selecting “Table” from the Content Type and “catalytic” from Concept menu.

The screenshot shows the Knovel search results page. The search query is "Benzene, table, catalytic". The search results are filtered by "Content Type" (Table) and "Concept" (catalytic). The search results show 1 result: "Lower Explosive Limits, Heats of Combustion, and Catalytic Ignition Temperatures for Selected Compounds". The result is a table from "Gas Purification (5th Edition)". The table lists the following properties for Benzene:

Explosion Limit	13000
Enthalpy Of Combustion Vol Basis	3527
Autoignition Temperature	204

The page also includes a sidebar with filters for Content Type, Concept, Industry, and Author. The search results are sorted by Relevancy. The page footer includes the Elsevier logo and copyright information.

SC 1.4.3: Elements must meet accessible color contrast thresholds.

Location(s):

1. `catalytic`

Reason flagged:

- Element has insufficient color contrast of 4.09 (foreground color: #767676, background color: #fff4be, font size: 12.0pt (16px), font weight: normal). Expected contrast ratio of 4.5:1
- The light gray on the highlight color is the issue, darkening the gray should fix it.

SC 4.1.2: Interactive controls must not be nested.

Location(s):

1. `<button id="view_all_parent_button" type="button" class="link primary my-4 hover:!border-b-0">`

Reason flagged:

- Element has focusable descendants.

3. Individual Search Results

Test Case: Test individual search result by choosing “Lower Explosive Limits, Heats of Combustion, and Catalytic Ignition Temperatures for Selected Compounds. Test the menu items at the top of the individual result screen starting with “Table of Contents” and ending with “View Text”.

Knovel My Knovel Browse Material Property Search Equations Unit Converter More Tools

Home > Search: (Benzene), table, cat... > Gas Purification (5th Edition) > Lower Explosive Limits, Heats of Combustion, and Catalytic Ignition Temperatures for Selected Compounds

Lower Explosive Limits, Heats of Combustion, and Catalytic Ignition Temperatures for Selected Compounds Tutorial Video Info

Table of Contents Save Download/Export Cite Unit Converter ViewText Filter the Table

Rows 1-31 of 31 Page 1 of 1

No.	compound	lower explosive limit (ppmv)	lower heat of combustion (Btu/scf)	catalytic ignition temp. (°F)	catalytic ignition temp. (°C)
<input type="checkbox"/>	12	Formaldehyde		300	149
<input type="checkbox"/>	6	Carbon monoxide		320	160
<input type="checkbox"/>	3	Benzene	13000	3527	400
<input type="checkbox"/>	29	Toluene	12000	4196	400
<input type="checkbox"/>	31	o-Xylene		470	243
<input type="checkbox"/>	20	Methylethylketone		475	246
<input type="checkbox"/>	23	n-Octane		490	254
<input type="checkbox"/>	7	n-Decane		500	260
<input type="checkbox"/>	8	n-Dodecane		540	282
<input type="checkbox"/>	28	n-Tetradecane		550	288
<input type="checkbox"/>	4	n-Butane	16000	2956	570
<input type="checkbox"/>	13	n-Heptane		580	304
<input type="checkbox"/>	24	n-Pentane	15000	3640	590
<input type="checkbox"/>	14	n-Hexane	11000	4324	630
<input type="checkbox"/>	26	Propane	21000	2274	650
<input type="checkbox"/>	9	Ethane	30000	1588	680
<input type="checkbox"/>	18	Methane	50000	892	760
<input type="checkbox"/>	1	Acetylene	25000	1397	
<input type="checkbox"/>	2	Ammonia	160000	356	
<input type="checkbox"/>	5	n-Butene	16000	2825	
<input type="checkbox"/>	10	Ethyl alcohol	33000	1419	
<input type="checkbox"/>	11	Ethylene	27000	1472	
<input type="checkbox"/>	15	Hydrogen sulfide	40000	583	
<input type="checkbox"/>	16	Isobutane	18	2947	
<input type="checkbox"/>	17	Isopentane	14000	3631	
<input type="checkbox"/>	10	Methyl alcohol	60	761	

Feedback | Improve Knovel

❖ No accessibility violations were found.

4. View Text Window

Test Case: Test “View Text” window.

The screenshot displays the Knovel website interface. At the top, there is a navigation bar with links for 'My Knovel', 'Browse', 'Material Property Search', 'Equations', 'Unit Converter', and 'More Tools'. Below this, the page title is 'Title Page Gas Purification (5th Edition) Latest Edition'. A search bar is located in the top right corner. The main content area shows the title page of the book, which includes a copyright notice: 'Copyrighted Materials Copyright © 1997 Elsevier Retrieved from www.knovel.com'. Below the copyright notice is a banner for 'FIFTH EDITION' and the main title 'GAS PURIFICATION' in large, bold letters. At the bottom of the page, there is an image of an industrial facility. On the left side, there is a table of contents with 16 chapters and sections for Tables (5) and Graphs (1).

❖ **No accessibility violations were found.**

Disclaimer: This high-level evaluation was conducted for the Library Accessibility Alliance and represents a good faith effort conducted within a limited time frame. It should not be assumed to be complete or free from error. No warranties or guarantees are implied. UT is not responsible for direct, indirect, or incidental damages based on this work; its use or interpretation by any individual, group, or organization; or on conditions beyond our control.