Summary

Both reviewers found the scientific rationale behind the skin notation assignments of Nonane to be generally acceptable. Reviewer 2 felt that the document clearly outlines the systemic health hazards, direct health hazards, and immune-mediated responses associated with skin exposure. Reviewer 1 would like to see a clear statement about data paucity and suggests the need to complete the dermtox profile.

Recommendations

- Add clear statement about data paucity. (Q1, Reviewer 1)
- Need to complete dermtox profile. (Q1, Reviewer 1)
- Contact primary suppliers for scientific data. (Q12, Reviewer 1)

Verbatim Reviewer Comments

1. Does this document clearly outline the systemic health hazards associated with exposures of the skin to the chemical? If not, what specific information is missing from the document?

Reviewer 1:
No Add clear statement about data paucity– and need to complete dermtox profile.

Reviewer 2:
The document clearly outlined the systemic health hazards associated with exposures of the skin to nonane.

2. If the SYS or SYS (FATAL) notations are assigned, is the rationale and logic behind the assignment clear? If not assigned, is the logic clear why it was not (e.g., insufficient data, no identified health hazard)?

Reviewer 1:
NA

Reviewer 2:
Based on the information available and covered in the document nonane was not assigned SYS or SYS (FATAL) notations. This is appropriate.

3. Does this document clearly outline the direct (localized) health hazards associated with exposures of the skin to the chemical? If not, what specific information is missing from the document?
Reviewer 1:
No. see #1 above.

Reviewer 2:
The document clearly outlined the direct (localized) health hazards associated with exposure of the skin to nonane.

4. If the DIR, DIR (IRR), or DIR (COR) notations are assigned, is the rationale and logic behind the assignment clear? If not assigned, is the logic clear why it was not (e.g., insufficient data, no identified health hazard)?

Reviewer 1:
NA

Reviewer 2:
The document assigned SK: DIR (IRR) notation for nonane. This notation is based on limited data which has been critically reviewed in the document.

5. Does this document clearly outline the immune-mediated responses (allergic response) health hazards associated with exposures of the skin to the chemical? If not, what specific information is missing from the document?

Reviewer 1:
No. see #1 above.

Reviewer 2:
The document analyzed all evidence of skin sensitization potential of nonane and concluded that there is no evidence of skin sensitization potential of nonane following dermal exposure.

6. If the SEN notation is assigned, is the rationale and logic behind the assignment clear? If not assigned, is the logic clear why it was not (e.g., insufficient data, no identified health hazard)?

Reviewer 1:
NA

Reviewer 2:
The logic is clear why SEN notation is not assigned to nonane. This is very clear.

7. If the ID\(^{(SK)}\) or SK were assigned, is the rationale and logic outlined within the document?

Reviewer 1:
NA

Reviewer 2:
No such notation is assigned for nonane and this logic is clear.
8. Are the conclusions supported by the data?

Reviewer 1:
No. see #1 above.

Reviewer 2:
The conclusions reached in the document are supported by data evaluated and analyzed.

9. Are the tables clear and appropriate?

Reviewer 1:
Yes

Reviewer 2:
Yes, tables are clear and appropriate.

10. Is the document organized appropriately? If not, what improvements are needed?

Reviewer 1:
Yes

Reviewer 2:
Yes, the document is organized properly.

11. Is the language of the manuscript acceptable as written? If not, what improvements are needed?

Reviewer 1:
Yes

Reviewer 2:
The language of the manuscript is acceptable as written.

12. Are you aware of any scientific data reported in governmental publications, databases, peer reviewed journals, or other sources that should be included within this document?

Reviewer 1:
Possible. Contact primary suppliers for data.

Reviewer 2:
All that is reported is appropriate and nothing is missing.

13. What is your final recommendation for this manuscript? (Do you agree with the scientific rationale that serves as a basis for the skin notation assignments?)

Reviewer 1:
Acceptable. See above re possible revision(s).

NB Add statement re data (or lack of) on:
a) Photoirritation
b) Photoallergic Contact Dermatitis
c) "Validity" of penetration algorithm

Reviewer 2:
I recommend that the document be accepted as presented.