Australian Government
Department of Health
Australian Industrial Chemicals Introduction Scheme

Chemicals that are unlikely to require further regulation to manage risks to health

Evaluation statement

14 January 2022

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AICIS evaluation statement

Subject of the evaluation

Chemicals unlikely to require further regulation to manage risks to health

Chemicals in this evaluation

See supporting information for the list of chemicals included in the evaluation.

Reason for the evaluation

An evaluation is required to provide information on risks to human health.

Parameters of evaluation

This evaluation provides information on chemicals, listed on the Australian Inventory of Industrial Chemicals (the Inventory), identified during the Evaluation Selection Analysis (ESA) process as unlikely to require further regulation to manage risks to health. The ESA takes into account the intrinsic hazard of the chemical, the potential human exposure and existing risk management measures.

Based on the use category, the ESA process first sought to validate the absence of the following hazards:

- Site limited – neurotoxic, carcinogenic, mutagenic or a reproductive toxin.
- Commercial – as above, plus very high acute toxicity, high repeat dose toxicity, high corrosivity and respiratory sensitisation.
- Domestic – as above plus moderate acute toxicity, moderate repeat dose toxicity, skin sensitisation and moderate corrosivity.
- Cosmetic – any classifiable hazard, including harmful by acute exposure and irritating to skin and eyes.

Where these hazards were identified, we considered whether the hazards would be present under the likely conditions of use, which were determined based on available information. For example, where a chemical is irritating because of its extreme pH, and the formulated product will be at a more neutral pH, the irritant property is not relevant to the product. This evaluation statement provides key information used during the ESA process including the highest use category and additional information on any factors that have contributed to the risk conclusions.

During the ESA, we may also identify chemicals that are only used in laboratories in very small quantities. No evaluation of the hazards were undertaken for these chemicals.

Summary of evaluation

Summary of introduction, use and end use

See supporting information for the highest use category identified for each chemical.

The categories used by AICIS, in order of increasing exposure, are:

- Non-industrial excluded uses (only) – food, therapeutic, agricultural and veterinary.
- Site limited – only used in large chemical operations.
- Commercial – used by small factories, scattered through the community, industrial cleaning, operations, and rare use by specialised hobbyist members of the public.
- Domestic – used in products generally available to the public, excluding cosmetics.
- Cosmetic – personal care products.

Human health

Summary of health risk

Public

Based on the available information, there are no identified risks to the public that require further regulation to manage the risk to human health. Although some of the chemicals with cosmetic and domestic uses may have potential health hazards, the risks to the public are minimised by:

- the concentrations to which the public are exposed
- normal precautions being taken when using domestic products to avoid skin and eye contact
- the systemic bioavailability of chemicals.

See supporting information for additional information on any factors that have contributed to the risk conclusions. Any requirements under poisons legislation as adopted by the relevant state or territory should be met to minimise risk.

Workers

Based on the available information, there are no identified risks to workers that require further regulation to manage the risk to health.

Although chemicals in this evaluation may meet the criteria for classification according to the Globally Harmonized System of Classification and Labelling of Chemicals (GHS) based on the highest category of use identified (see supporting information), controls to manage the risk to workers are expected to be in place.

All requirements under workplace health and safety as adopted by the relevant state or territory should be met to minimise risk.

Conclusions

The conclusions of this evaluation are based on the information described in this statement. Obligations to report additional information about hazards under section 100 of the Industrial Chemicals Act 2019 apply.

The Executive Director is satisfied that, based on the available information for these chemicals, identified human health risks can be managed within existing risk management frameworks. This is provided that all requirements are met under environmental, workplace health and safety and poisons legislation as adopted by the relevant state or territory.

Supporting information

CAS No.	Chemical Name	Highest Use Category (Human Health)	Additional information
51-35-4	L-Proline, 4-hydroxy-, trans-	Cosmetic	-
54-12-6	DL-Tryptophan	Cosmetic	-
56-40-6	Glycine	Cosmetic	-
56-41-7	L-Alanine	Cosmetic	-
56-45-1	L-Serine	Cosmetic	-
56-84-8	L-Aspartic acid	Cosmetic	Data available on the function of the chemical indicate that it may be used in cosmetics, but only at low concentrations.
56-85-9	L-Glutamine	Cosmetic	-
56-86-0	L-Glutamic acid	Cosmetic	-
56-89-3	L-Cystine	Cosmetic	-
60-18-4	L-Tyrosine	Cosmetic	-
61-90-5	L-Leucine	Cosmetic	-
63-68-3	L-Methionine	Cosmetic	-
63-91-2	L-Phenylalanine	Cosmetic	-
70-47-3	L-Asparagine	Cosmetic	-
70-53-1	DL-Lysine, monohydrochlorid-	Domestic	-
71-00-1	L-Histidine	Cosmetic	-
72-18-4	L-Valine	Cosmetic	-
72-19-5	L-Threonine	Cosmetic	-
73-22-3	L-Tryptophan	Cosmetic	-
73-32-5	L-Isoleucine	Cosmetic	-
74-79-3	L-Arginine	Cosmetic	-
79-22-1	Carbonochloridic acid, methyl ester	Site-Limited	This chemical is not stable. It is expected rapidly hydrolyse in contact with water or moist air.

80-68-2	DL-Threonine	Cosmetic	-
98-79-3	L-Proline, 5-oxo-	Cosmetic	Data available on the function of the chemical indicate that it may be used in cosmetics, but only at low concentrations
103-43-5	Butanedioic acid, bis(phenylmethyl) ester	Commercial	-
105-97-5	Hexanedioic acid, didecyl ester	Cosmetic	-
105-99-7	Hexanedioic acid, dibutyl ester	Cosmetic	-
106-19-4	Hexanedioic acid, dipropyl ester	Cosmetic	-
106-75-2	Carbonochloridic acid, oxydi-2,1-ethanediyl ester	Site-Limited	This chemical is not stable. It is expected rapidly hydrolyse in contact with water or moist air.
106-79-6	Decanedioic acid, dimethyl ester	Domestic	-
108-23-6	Carbonochloridic acid, 1-methylethyl ester	Site-Limited	This chemical is not stable. It is expected rapidly hydrolyse in contact with water or moist air.
108-59-8	Propanedioic acid, dimethyl ester	Cosmetic	-
108-63-4	Hexanedioic acid, bis(1-methylheptyl) ester	Cosmetic	-
109-43-3	Decanedioic acid, dibutyl ester	Cosmetic	-
110-33-8	Hexanedioic acid, dihexyl ester	Cosmetic	-
110-40-7	Decanedioic acid, diethyl ester	Cosmetic	-
123-79-5	Hexanedioic acid, dioctyl ester	Cosmetic	-
124-05-0	Carbonochloridic acid, 1,2-ethanediyl ester	Site-Limited	This chemical is not stable. It is expected rapidly hydrolyse in contact with water or moist air.
133-08-4	Propanedioic acid, butyl-, diethyl ester	Commercial	-
133-13-1	Propanedioic acid, ethyl-, diethyl ester	Commercial	-
138-15-8	L-Glutamic acid, hydrochloride	Domestic	-
141-03-7	Butanedioic acid, dibutyl ester	Commercial	-
141-04-8	Hexanedioic acid, bis(2-methylpropyl) ester	Cosmetic	-
141-28-6	Hexanedioic acid, diethyl ester	Cosmetic	-
147-85-3	L-Proline	Cosmetic	-
149-87-1	DL-Proline, 5-oxo-	Cosmetic	Data available on the function of the chemical indicate that it may be used in cosmetics, but only at low concentrations
151-32-6	Hexanedioic acid, dinonyl ester	Domestic	-
302-72-7	DL-Alanine	Cosmetic	-

302-84-1	DL-Serine	Cosmetic	-
328-39-2	DL-Leucine	Cosmetic	-
338-69-2	D-Alanine	Domestic	-
348-67-4	D-Methionine	Cosmetic	-
443-79-8	DL-Isoleucine	Cosmetic	-
501-53-1	Carbonochloridic acid, phenylmethyl ester	Site-Limited	This chemical is not stable. It is expected rapidly hydrolyse in contact with water or moist air.
503-38-8	Carbonochloridic acid, trichloromethyl ester	Site-Limited	This chemical is not stable. It is expected rapidly hydrolyse in contact with water or moist air.
516-06-3	DL-Valine	Cosmetic	-
543-27-1	Carbonochloridic acid, 2-methylpropyl ester	Site-Limited	This chemical is not stable. It is expected rapidly hydrolyse in contact with water or moist air.
556-02-5	D-Tyrosine	Cosmetic	-
556-03-6	DL-Tyrosine	Cosmetic	-
592-34-7	Carbonochloridic acid, butyl ester	Site-Limited	This chemical is not stable. It is expected rapidly hydrolyse in contact with water or moist air.
609-36-9	DL-Proline	Cosmetic	-
617-45-8	DL-Aspartic acid	Cosmetic	-
617-65-2	DL-Glutamic acid	Cosmetic	-
618-27-9	L-Proline, 4-hydroxy-, cis-	Domestic	-
627-11-2	Carbonochloridic acid, 2-chloroethyl ester	Site-Limited	This chemical is not stable. It is expected rapidly hydrolyse in contact with water or moist air.
640-68-6	D-Valine	Cosmetic	-
645-35-2	L-Histidine, monohydrochloride	Cosmetic	Data available on the function of the chemical indicate that it may be used in cosmetics, but only at low concentrations
1070-62-8	Pentanedioic acid, monoethyl ester	Commercial	-
1115-63-5	L-Aspartic acid, monopotassium salt	Cosmetic	-
1119-34-2	L-Arginine, monohydrochloride	Cosmetic	-
1330-86-5	Hexanedioic acid, diisooctyl ester	Cosmetic	-
1472-87-3	Tridecanedioic acid, dimethyl ester	Cosmetic	-
1700-12-5	Hexanedioic acid, bis(2-hydroxyethyl) ester	Commercial	-

1732-09-8	Octanedioic acid, dimethyl ester	Commercial	-
1885-14-9	Carbonochloridic acid, phenyl ester	Site-Limited	This chemical is not stable. It is expected rapidly hydrolyse in contact with water or moist air.
2050-23-9	Octanedioic acid, diethyl ester	Commercial	-
2157-16-6	Carbonochloridic acid, 1,4-butanediyl ester	Site-Limited	This chemical is not stable. It is expected rapidly hydrolyse in contact with water or moist air.
2163-48-6	Propanedioic acid, propyl-, diethyl ester	Commercial	-
2409-52-1	Butanedioic acid, methylene-, diethyl ester	Commercial	-
2432-87-3	Decanedioic acid, dioctyl ester	Domestic	-
2451-84-5	Hexanedioic acid, bis(phenylmethyl) ester	Commercial	-
2741-62-0	Decanedioic acid, ditridecyl ester	Domestic	-
2916-20-3	Carbonochloridic acid, 1,6-hexanediyl ester	Site-Limited	This chemical is not stable. It is expected rapidly hydrolyse in contact with water or moist air.
2937-50-0	Carbonochloridic acid, 2-propenyl ester	Site-Limited	This chemical is not stable. It is expected rapidly hydrolyse in contact with water or moist air.
3130-87-8	DL-Asparagine	Cosmetic	-
3195-24-2	Propanedioic acid, di-2-propenyl-, diethyl ester	Commercial	-
3407-42-9	Cyclohexanol, 3-(5,5,6-trimethylbicyclo[2.2.1]hept-2-yl)-	Cosmetic	Data available on the function of the chemical indicate that it may be used in cosmetics, but only at low concentrations.
4998-57-6	DL-Histidine	Cosmetic	-
5130-24-5	Carbonochloridic acid, ethenyl ester	Site-Limited	This chemical is not stable. It is expected rapidly hydrolyse in contact with water or moist air.
5794-13-8	L-Asparagine, monohydrate	Cosmetic	-
5934-29-2	L-Histidine, monohydrochloride, monohydrate	Cosmetic	Data available on the function of the chemical indicate that it may be used in cosmetics, but only at low concentrations
6000-44-8	Glycine, monosodium salt	Cosmetic	-
7259-25-8	L-Aspartic acid, monopotassium salt, hemihydrate	Domestic	-
10098-89-2	L-Lysine, hydrochloride	Cosmetic	Data available on the function of the chemical indicate that it may be used in cosmetics, but only at low concentrations

10203-58-4	Propanedioic acid, (2-methylpropyl)-, diethyl ester	Commercial	-
10283-83-7	Butanedioic acid, bis(2-hydroxyethyl) ester	Commercial	-
14007-45-5	L-Aspartic acid, potassium salt	Cosmetic	-
16177-21-2	L-Glutamic acid, sodium salt	Cosmetic	-
16870-43-2	L-Tyrosine, hydrochloride	Domestic	-
16958-92-2	Hexanedioic acid, ditridecyl ester	Cosmetic	-
17341-93-4	Carbonochloridic acid, 2,2,2-trichloroethyl ester	Site-Limited	This chemical is not stable. It is expected rapidly hydrolyse in contact with water or moist air.
17462-58-7	Carbonochloridic acid, 1-methylpropyl ester	Site-Limited	This chemical is not stable. It is expected rapidly hydrolyse in contact with water or moist air.
18610-59-8	L-Proline, 1-hydroxy	Domestic	-
19473-49-5	L-Glutamic acid, monopotassium salt	Domestic	-
21059-46-1	L-Aspartic acid, calcium salt	Cosmetic	-
24468-13-1	Carbonochloridic acid, 2-ethylhexyl ester	Site-Limited	This chemical is not stable. It is expected rapidly hydrolyse in contact with water or moist air.
26272-90-2	Carbonochloridic acid, hexadecyl ester	Site-Limited	This chemical is not stable. It is expected rapidly hydrolyse in contact with water or moist air.
26401-35-4	Hexanedioic acid, diisotridecyl ester	Domestic	-
26720-21-8	Hexanedioic acid, dihexadecyl ester	Cosmetic	-
27132-23-6	Propanedioic acid, diethyl-, dimethyl ester	Commercial	-
27178-16-1	Hexanedioic acid, diisodecyl ester	Cosmetic	-
27214-90-0	Decanedioic acid, diisooctyl ester	Commercial	-
28024-16-0	Butanedioic acid, ethyl 3-methylbutyl ester	Commercial	-
28874-51-3	L-Proline, 5-oxo-, monosodium salt	Cosmetic	Data available on the function of the chemical indicate that it may be used in cosmetics, but only at low concentrations
28920-43-6	Carbonochloridic acid, 9H-fluoren-9-ylmethyl ester	Site-Limited	This chemical is not stable. It is expected rapidly hydrolyse in contact with water or moist air.
29338-37-2	Pentanedioic acid, bis(2-hydroxyethyl) ester	Commercial	-
32864-38-3	Propanedioic acid, 1,1-dimethylethyl ethyl ester	Commercial	-

33703-08-1	Hexanedioic acid, diisononyl ester	Cosmetic	-
37675-88-0	L-Proline, 5-oxo-, sodium salt (2:1)	Domestic	-
39162-75-9	L-Aspartic acid, calcium salt (2:1)	Domestic	-
50893-53-3	Carbonochloridic acid, 1-chloroethyl ester	Site-Limited	This chemical is not stable. It is expected rapidly hydrolyse in contact with water or moist air.
54571-67-4	DL-Proline, 5-oxo-, monosodium salt	Cosmetic	Data available on the function of the chemical indicate that it may be used in cosmetics, but only at low concentrations
56272-24-3	DL-Histidine, hydrochloride	Domestic	-
56677-60-2	Carbonochloridic acid, tetradecyl ester	Site-Limited	This chemical is not stable. It is expected rapidly hydrolyse in contact with water or moist air.
57282-49-2	L-Lysine, monoacetate	Domestic	-
141847-13-4	Butanedioic acid, dodecenyl-, mono(2-methylpropyl) ester	Commercial	-

References

AICIS (Australian Industrial Chemicals Introduction Scheme) (2019), *The Industrial Chemicals Act 2019*, Office of Chemical Safety, Australian Government Department of Health, accessed September 2021.

AICIS (Australian Industrial Chemicals Introduction Scheme) (n.d.), *The Australian Inventory of Industrial Chemicals (Inventory)*, Office of Chemical Safety, Australian Government Department of Health, accessed September 2021.