

Substance Name	CASRN	<i>In Vitro</i> Conc. Tested	<i>In Vivo</i> Conc. Tested	Chemical Class	<i>In Vivo</i> Physical Form Tested	pH	Property of Interest	<i>In Vivo</i> (GHS) Classification ¹	GHS Category 1 Subclass ²	<i>In Vivo</i> (EPA) Classification ³	<i>In Vivo</i> (EU) Classification ⁴	<i>In Vitro</i> Classification (IS(A)) ⁵	Reference
Acetic acid	64-19-7	10%	10%	Carboxylic acid	Solution			Category 1	4	Category I	R41	Severe	Hagino et al. (1999)/Submitted Y. Ohno Data
Butanol	71-36-3	10%	10%	Alcohol	Solution			Category 1	4	SCNM	R41	Severe	Hagino et al. (1999)/Submitted Y. Ohno Data
Cetyltrimethylammonium bromide	57-09-0	10%	10%	Organic salt, Onium	Solution			Category 1	4	Category I	R41	Severe	Hagino et al. (1999)/Submitted Y. Ohno Data
Chlorhexidine gluconate Solution (20% Solution)	18472-51-0	10%	10%	Amidine, Ester	Solution			Category 2B		Category II	Nonirritant	Severe	Hagino et al. (1999)/Submitted Y. Ohno Data
Di(2-ethylhexyl) sodium sulfosuccinate	577-11-7	10%	10%	Organic salt, Sulfur containing compound, Ester	Solution			Category 1	4	Category I	R36	Severe	Hagino et al. (1999)/Submitted Y. Ohno Data
Diisopropanolamine	110-97-4	10%	10%	Amine, Alcohol	Solution			Nonirritant		Category III	Nonirritant	Moderate	Hagino et al. (1999)/Submitted Y. Ohno Data
Domiphen bromide	538-71-6	10%	10%	Organic salt, Onium, Ether	Solution			Category 1	4	Category I	R41	Severe	Hagino et al. (1999)/Submitted Y. Ohno Data
Ethanol	64-17-5	100%	100%	Alcohol	Liquid			SCNM		SCNM	SCNM	Severe	Hagino et al. (1999)/Submitted Y. Ohno Data
Ethanol	64-17-5	10%	10%	Alcohol	Solution			Nonirritant		Category IV	Nonirritant	Slight	Hagino et al. (1999)/Submitted Y. Ohno Data/ Kojima et al. (1995)
Glycolic acid	79-14-1	10%	10%	Carboxylic acid, Alcohol	Solution			Category 2B		Category III	Nonirritant	Severe	Hagino et al. (1999)/Submitted Y. Ohno Data
Lactic acid	50-21-5	10%	10%	Carboxylic acid, Alcohol	Solution			SCNM		Category III	SCNM	Severe	Hagino et al. (1999)/Submitted Y. Ohno Data
Lactic acid	50-21-5	100%	100%	Carboxylic acid, Alcohol	Liquid			Category 1	4	Category I	R41	Severe	Hagino et al. (1999)/Submitted Y. Ohno Data
Monoethanolamine	141-43-5	10%	10%	Amine, Alcohol	Solution			Category 2B		Category III	Nonirritant	Severe	Hagino et al. (1999)/Submitted Y. Ohno Data
Oil/Water Emulsion-HZA		Undiluted	Undiluted	Formulation	Solution			Nonirritant		Category III	Nonirritant	Nonirritant	Gettings et al. (1994)
Oil/Water Emulsion-HZC		Undiluted	Undiluted	Formulation	Solution			Nonirritant		Category III	Nonirritant	Nonirritant	Gettings et al. (1994)

Substance Name	CASRN	<i>In Vitro</i> Conc. Tested	<i>In Vivo</i> Conc. Tested	Chemical Class	<i>In Vivo</i> Physical Form Tested	pH	Property of Interest	<i>In Vivo</i> (GHS) Classification ¹	GHS Category 1 Subclass ²	<i>In Vivo</i> (EPA) Classification ³	<i>In Vivo</i> (EU) Classification ⁴	<i>In Vitro</i> Classification (IS(A)) ⁵	Reference
Oil/Water Emulsion-HZE		Undiluted	Undiluted	Formulation	Solution			Nonirritant		Category IV	Nonirritant	Nonirritant	Gettings et al. (1994)
Oil/Water Emulsion-HZF		Undiluted	Undiluted	Formulation	Solution			Nonirritant		Category III	Nonirritant	Moderate	Gettings et al. (1994)
Oil/Water Emulsion-HZH		Undiluted	Undiluted	Formulation	Solution			Nonirritant		Category III	Nonirritant	Severe	Gettings et al. (1994)
Oil/Water Emulsion-HZI		Undiluted	Undiluted	Formulation	Solution			Nonirritant		Category IV	Nonirritant	Slight	Gettings et al. (1994)
Oil/Water Emulsion-HZJ		Undiluted	Undiluted	Formulation	Solution			Nonirritant		Category IV	Nonirritant	Nonirritant	Gettings et al. (1994)
Oil/Water Emulsion-HZL		Undiluted	Undiluted	Formulation	Solution			Nonirritant		Category III	Nonirritant	Slight	Gettings et al. (1994)
Oil/Water Emulsion-HZM		Undiluted	Undiluted	Formulation	Solution			Nonirritant		Category III	Nonirritant	Moderate	Gettings et al. (1994)
Oil/Water Emulsion-HZN		Undiluted	Undiluted	Formulation	Solution			Nonirritant		Category IV	Nonirritant	Slight	Gettings et al. (1994)
Oil/Water Emulsion-HZO		Undiluted	Undiluted	Formulation	Solution			Nonirritant		Category IV	Nonirritant	Nonirritant	Gettings et al. (1994)
Oil/Water Emulsion-HZR		Undiluted	Undiluted	Formulation	Solution			Category 1	1	Category I	R41	Severe	Gettings et al. (1994)
Oil/Water Emulsion-HZS		Undiluted	Undiluted	Formulation	Solution			Nonirritant		Category IV	Nonirritant	Severe	Gettings et al. (1994)
Oil/Water Emulsion-HZT		Undiluted	Undiluted	Formulation	Solution			Nonirritant		Category IV	Nonirritant	Slight	Gettings et al. (1994)
Oil/Water Emulsion-HZU		Undiluted	Undiluted	Formulation	Solution			Nonirritant		Category IV	Nonirritant	Nonirritant	Gettings et al. (1994)
Oil/Water Emulsion-HZV		Undiluted	Undiluted	Formulation	Solution			Nonirritant		Category III	Nonirritant	Nonirritant	Gettings et al. (1994)
Oil/Water Emulsion-HZW		Undiluted	Undiluted	Formulation	Solution			Nonirritant		Category III	Nonirritant	Nonirritant	Gettings et al. (1994)
Oil/Water Emulsion-HZY		Undiluted	Undiluted	Formulation	Solution			Nonirritant		Category IV	Nonirritant	Severe	Gettings et al. (1994)
Potassium laurate	10124-65-9	10%	10%	Organic salt, Carboxylic acid salt	Solution			Category 1	4	Category I	R41	Severe	Hagino et al. (1999)/Submitted Y. Ohno Data/ Kojima et al. (1995)
Sodium lauryl sulfate	151-21-3	10%		Organic salt, Carboxylic acid salt	Unknown			Category 1/Category 2A	4	Category I/Category II	R41/Nonirritant	Moderate	Kojima et al. (1995)
Stearyltrimethylammonium chloride	15461-40-2	10%	10%	Organic salt, Onium	Solution			Category 1	4	Category I	R41	Severe	Hagino et al. (1999)/Submitted Y. Ohno Data/ Kojima et al. (1995)
Surfactant Based Formulation 1-HZA		10%	Undiluted	Formulation	Solution			Category 1	1	Category I	R41	Moderate	Gettings et al. (1996)
Surfactant Based Formulation 2-HZB		10%	Undiluted	Formulation	Solution			Category 1	1	Category I	R41	Slight	Gettings et al. (1996)

Substance Name	CASRN	<i>In Vitro</i> Conc. Tested	<i>In Vivo</i> Conc. Tested	Chemical Class	<i>In Vivo</i> Physical Form Tested	pH	Property of Interest	<i>In Vivo</i> (GHS) Classification ¹	GHS Category 1 Subclass ²	<i>In Vivo</i> (EPA) Classification ³	<i>In Vivo</i> (EU) Classification ⁴	<i>In Vitro</i> Classification (IS(A)) ⁵	Reference
Surfactant Based Formulation 3-HZC		10%	Undiluted	Formulation	Solution			Category 1	1	Category I	R41	Severe	Gettings et al. (1996)
Surfactant Based Formulation 4-HZD		10%	Undiluted	Formulation	Solution			Category 2B		Category III	Nonirritant	Moderate	Gettings et al. (1996)
Surfactant Based Formulation 5-HZE		10%	Undiluted	Formulation	Solution			SCNM		Category I	SCNM	Slight	Gettings et al. (1996)
Surfactant Based Formulation 6-HZF		10%	Undiluted	Formulation	Solution			Category 1	1	Category I	R41	Moderate	Gettings et al. (1996)
Surfactant Based Formulation 7-HZG		10%	Undiluted	Formulation	Solution			Category 1	1	Category I	R41	Moderate	Gettings et al. (1996)
Surfactant Based Formulation 8-HZH		10%	Undiluted	Formulation	Solution			Nonirritant		Category IV	Nonirritant	Slight	Gettings et al. (1996)
Surfactant Based Formulation 9-HZI		10%	Undiluted	Formulation	Solution			Category 1	1	Category I	R41	Severe	Gettings et al. (1996)
Surfactant Based Formulation 10-HZJ		10%	Undiluted	Formulation	Solution			Nonirritant		Category IV	Nonirritant	Slight	Gettings et al. (1996)
Surfactant Based Formulation 11-HZK		10%	Undiluted	Formulation	Solution			Category 1	1	Category I	R41	Moderate	Gettings et al. (1996)
Surfactant Based Formulation 12-HZL		10%	Undiluted	Formulation	Solution			Category 1	1	Category I	R41	Severe	Gettings et al. (1996)
Surfactant Based Formulation 13-HZM		10%	Undiluted	Formulation	Solution			Category 1	1	Category I	R41	Slight	Gettings et al. (1996)
Surfactant Based Formulation 14-HZN		10%	Undiluted	Formulation	Solution			Category 1	1	Category I	R41	Moderate	Gettings et al. (1996)
Surfactant Based Formulation 15-HZP		10%	Undiluted	Formulation	Solution			Nonirritant		Category III	Nonirritant	Slight	Gettings et al. (1996)
Surfactant Based Formulation 16-HZQ		10%	Undiluted	Formulation	Solution			Nonirritant		Category III	Nonirritant	Slight	Gettings et al. (1996)
Surfactant Based Formulation 17-HZR		10%	Undiluted	Formulation	Solution			Category 1	1	Category I	R41	Moderate	Gettings et al. (1996)
Surfactant Based Formulation 18-HZS		10%	Undiluted	Formulation	Solution			Category 1	1	Category I	R41	Moderate	Gettings et al. (1996)
Surfactant Based Formulation 19-HZT		10%	Undiluted	Formulation	Solution			Nonirritant		Category IV	Nonirritant	Nonirritant	Gettings et al. (1996)
Surfactant Based Formulation 20-HZU		10%	Undiluted	Formulation	Solution			Category 2B		Category III	R36	Slight	Gettings et al. (1996)
Surfactant Based Formulation 21-HZV		10%	Undiluted	Formulation	Solution			Category 1	1	Category I	R41	Moderate	Gettings et al. (1996)
Surfactant Based Formulation 22-HZW		10%	Undiluted	Formulation	Solution			Category 1	1	Category I	R41	Moderate	Gettings et al. (1996)
Surfactant Based Formulation 23-HZX		10%	Undiluted	Formulation	Solution			Category 1	1	Category I	R41	Severe	Gettings et al. (1996)
Surfactant Based Formulation 24-HZY		10%	Undiluted	Formulation	Solution			Category 1	1	Category I	R41	Moderate	Gettings et al. (1996)
Surfactant Based Formulation 25-HZZ		10%	Undiluted	Formulation	Solution			Nonirritant		Category IV	Nonirritant	Nonirritant	Gettings et al. (1996)

Substance Name	CASRN	<i>In Vitro</i> Conc. Tested	<i>In Vivo</i> Conc. Tested	Chemical Class	<i>In Vivo</i> Physical Form Tested	pH	Property of Interest	<i>In Vivo</i> (GHS) Classification ¹	GHS Category 1 Subclass ²	<i>In Vivo</i> (EPA) Classification ³	<i>In Vivo</i> (EU) Classification ⁴	<i>In Vitro</i> Classification (IS(A)) ⁵	Reference
Triethanolamine	102-71-6	100%	100%	Amine, Alcohol	Liquid			Nonirritant		Category III	Nonirritant	Moderate	Hagino et al. (1999)/Submitted Y. Ohno Data
Triethanolamine	102-71-6	10%	10%	Amine, Alcohol	Solution			Nonirritant		Category IV	Nonirritant	Severe	Hagino et al. (1999)/Submitted Y. Ohno Data/ Bagley et al. (1992)
Triton X-100	9002-93-1	1%	1%	Ether	Solution			Nonirritant		Category III	Nonirritant	Severe	Bagley et al. (1992)
Triton X-100	9002-93-1	10%		Ether	Unknown			Category 1	NC	Category II	SCNM	Moderate	Kojima et al. (1995)

Abbreviations: CASRN = Chemical Abstracts Service Registry Number; Conc. = Concentration; EPA = U.S. Environmental Protection Agency; EU = European Union; GHS = Globally Harmonized System; SCNM - Study Criteria Not Met.

¹Eye Irritant Category 1 = irreversible effects on the eye/serious damage to the eye; Category 2A = reversible effects on the eye/irritating to the eyes; Category 2B = reversible effects on the eye/mildly irritating to the eyes; Nonirritant

²NICEATM-defined subgroups assigned based on the lesions that drove classification of a GHS Category 1 substance. 1: based on lesions that are persistent; 2: based on lesions that are severe (not including corneal opacity score equal to 4); 3: based on lesions that are severe (not including corneal opacity score equal to 4) and persistent; 4: corneal opacity score equal to 4 at any time; NC: No subclassification could be made based on the data.

³Toxicity Category I for the Primary Eye Irritation Study = Corrosive, or corneal involvement or irritation not reversible within 21 days; Category II = Corneal involvement or irritation clearing in 8-21 days; Category III = Corneal involvement or irritation clearing in 7 days or less; Category IV = Minimal effects clearing within 24 hr.

⁴Risk phrase R41 = risk of serious damage to the eyes; R36 = irritating to the eyes; nonirritant = not an eye irritant.

⁵IS(A) represents irritation scores that were calculated using the method described in Leupke (1985); classification scheme used as described in Leupke (1985).