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SAFETY DATA SHEET

1. Identification

Product identifier: Raymond Spray and Wipe Cleaner 990-400/SC1

Other means of identification

SDS number: RE1000040543

Recommended restrictions

Product Use: Cleaner

Restrictions on use: Not known.

Manufacturer/Importer/Distributor Information

Manufacturer

Company Name: RAYMOND CORPORATION
Address: 6650 KIRKVILLE ROAD
EAST SYRACUSE, NY 13057

1-315-463-5000

Telephone: Fax:

Emergency telephone number: 1-866-836-8855

2. Hazard(s) identification

Hazard Classification

Health Hazards

Serious Eye Damage/Eye Irritation Category 2A
Toxic to reproduction Category 1B

Environmental Hazards

Acute hazards to the aquatic Category 3 environment

Label Elements

Hazard Symbol:



Signal Word: Danger

Hazard Statement: Causes serious eye irritation.

May damage fertility or the unborn child.

Harmful to aquatic life.

Precautionary Statements

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Prevention: Wash thoroughly after handling. Wear protective gloves/protective

clothing/eye protection/face protection. Obtain special instructions before use. Do not handle until all safety precautions have been read and

understood. Use personal protective equipment as required. Avoid release

to the environment.

Response: IF IN EYES: Rinse cautiously with water for several minutes. Remove

contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. IF exposed or concerned: Get

medical advice/attention.

Storage: Store locked up.

Disposal: Dispose of contents/container to an appropriate treatment and disposal

facility in accordance with applicable laws and regulations, and product

characteristics at time of disposal.

Hazard(s) not otherwise classified (HNOC):

None.

3. Composition/information on ingredients

Mixtures

Chemical Identity	CAS number	Content in percent (%)*
Boric acid, sodium salt	12179-04-3	1 - <5%
Ethanol, 2-butoxy-	111-76-2	1 - <5%
Benzenesulfonic acid, dodecyl, sodium salt (1:1)	25155-30-0	1 - <5%
Alcohols, C12-15, ethoxylated	68131-39-5	1 - <5%
Sodium hydroxide (Na(OH))	1310-73-2	0.1 - <1%

^{*} All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Ingestion: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

Inhalation: Move to fresh air.

Skin Contact: Wash skin thoroughly with soap and water. If skin irritation occurs: Get

medical advice/attention.

Eye contact: Immediately flush with plenty of water for at least 15 minutes. If easy to do,

remove contact lenses. Get medical attention.

Most important symptoms/effects, acute and delayed

Symptoms: No data available.

Hazards: No data available.

Indication of immediate medical attention and special treatment needed

Treatment: No data available.

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5. Fire-fighting measures

General Fire Hazards: No unusual fire or explosion hazards noted.

Suitable (and unsuitable) extinguishing media

Suitable extinguishing

media:

Use fire-extinguishing media appropriate for surrounding materials.

Unsuitable extinguishing

media:

Do not use water jet as an extinguisher, as this will spread the fire.

Specific hazards arising from

the chemical:

During fire, gases hazardous to health may be formed.

Special protective equipment and precautions for firefighters

Special fire fighting

procedures:

No data available.

Special protective equipment

for fire-fighters:

Self-contained breathing apparatus and full protective clothing must be

worn in case of fire.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures: No data available.

Methods and material for containment and cleaning

up:

Absorb spill with vermiculite or other inert material, then place in a container for chemical waste. Dike far ahead of larger spill for later recovery and

disposal.

Notification Procedures: Dike for later disposal. Prevent entry into waterways, sewer, basements or

confined areas. Stop the flow of material, if this is without risk.

Environmental Precautions: Avoid release to the environment. Prevent further leakage or spillage if safe

to do so. Do not contaminate water sources or sewer.

7. Handling and storage

Precautions for safe handling: Avoid contact with eyes. Wash hands thoroughly after handling. Do not

handle until all safety precautions have been read and understood. Obtain special instructions before use. Use personal protective equipment as

required.

Conditions for safe storage,

including any incompatibilities:

Store locked up.

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

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Chemical Identity	Туре	Exposure Lim	nit Values	Source
Boric acid, sodium salt - Inhalable fraction.	TWA 2 mg/m3		2 mg/m3	US. ACGIH Threshold Limit Values (02 2012)
	STEL		6 mg/m3	US. ACGIH Threshold Limit Values (02 2012)
Boric acid, sodium salt	REL		1 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	TWA		10 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	TWA		10 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	TWA PEL		5 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
Boric acid, sodium salt - Particulate.			2 μg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL		20 μg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
Ethanol, 2-butoxy-	TWA	20 ppm		US. ACGIH Threshold Limit Values (2008)
	TWA	25 ppm	120 mg/m3	US. OSHA Table Z-1-A (29 CFR 1910.1000) (1989)
	REL	5 ppm	24 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	PEL TAKE BEI	50 ppm	240 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	TWA PEL	20 ppm	97 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
	TWA	25 ppm	120 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	AN ESL		760 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	AN ESL		3,700 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL		2,900 µg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL		600 ppb	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
Sodium hydroxide (Na(OH))	Ceiling		2 mg/m3	US. ACGIH Threshold Limit Values (2008)
	Ceiling		2 mg/m3	(1989)
	Ceil_Time		2 mg/m3	US. NIOSH: Pocket Guide to Chemical Hazards (2005)
	PEL		2 mg/m3	US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006)
	Ceiling		2 mg/m3	US. Tennessee. OELs. Occupational Exposure Limits, Table Z1A (06 2008)
	Ceiling		2 mg/m3	US. California Code of Regulations, Title 8, Section 5155. Airborne Contaminants (09 2006)
Sodium hydroxide (Na(OH)) - Particulate.	AN ESL		2 μg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)
	ST ESL		20 μg/m3	US. Texas. Effects Screening Levels (Texas Commission on Environmental Quality) (11 2016)

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Biological Limit Values

Chemical Identity	Exposure Limit Values	Source
Ethanol, 2-butoxy-	200 mg/g (Creatinine in urine)	ACGIH BEL (03 2013)
(Butoxyacetic acid (BAA),		
with hydrolysis: Sampling		
time: End of shift.)		

Appropriate Engineering

Controls

No data available.

Individual protection measures, such as personal protective equipment

General information: Provide easy access to water supply and eye wash facilities. Good general

ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. If exposure limits have not been established, maintain airborne levels

to an acceptable level.

Eye/face protection: Wear safety glasses with side shields (or goggles).

Skin Protection

Hand Protection: No data available.

Other: No data available.

Respiratory Protection: In case of inadequate ventilation use suitable respirator. Seek advice from

local supervisor.

Hygiene measures: Avoid contact with eyes. Observe good industrial hygiene practices. Do not

handle until all safety precautions have been read and understood. Obtain

special instructions before use.

9. Physical and chemical properties

Appearance

Physical state: liquid Form: liquid

Color: No data available. Odor: No data available. Odor threshold: No data available. No data available. pH: Melting point/freezing point: estimated 20 °C Initial boiling point and boiling range: Estimated 100 °C Flash Point: estimated > 100 °C **Evaporation rate:** No data available. Flammability (solid, gas): No data available.

Upper/lower limit on flammability or explosive limits

Flammability limit - upper (%):

Flammability limit - lower (%):

No data available.

No data available.

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Explosive limit - upper (%):

Explosive limit - lower (%):

Vapor pressure:

No data available.

No data available.

Vapor density: No data available.

Density: 0.92 g/cm3

Relative density: No data available.

Solubility(ies)

Solubility in water:

Solubility (other):

No data available.

No data available.

No data available.

No data available.

Auto-ignition temperature:No data available.Decomposition temperature:No data available.Viscosity:No data available.

10. Stability and reactivity

Reactivity: No data available.

Chemical Stability: Material is stable under normal conditions.

Possibility of hazardous

reactions:

No data available.

Conditions to avoid: Avoid heat or contamination.

Incompatible Materials: No data available.

Hazardous Decomposition

Products:

No data available.

11. Toxicological information

Information on likely routes of exposure

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Ingestion: No data available.

Symptoms related to the physical, chemical and toxicological characteristics

Inhalation: No data available.

Skin Contact: No data available.

Eye contact: No data available.

Ingestion: No data available.

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Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

Oral

Product: ATEmix: 41,121.06 mg/kg

Dermal

Product: ATEmix: 21,060.94 mg/kg

Inhalation

Product: ATEmix: 800 ma/l

ATEmix: 200 mg/l

Repeated dose toxicity

Product: No data available.

Specified substance(s):

Ethanol, 2-butoxy-NOAEL (Rabbit(Female, Male), Dermal, 90 d): > 150 mg/kg Dermal

Experimental result, Key study

NOAEL (Rat(Female), Oral, 90 d): < 82 mg/kg Oral Experimental result, Key

study

NOAEL (Rat(Female), Inhalation, 2 yr): < 31 ppm(m) Inhalation

Experimental result, Key study

Alcohols, C12-15, NOAEL (Rat(Female, Male), Oral, 90 d): 500 mg/kg Oral Read-across based

on grouping of substances (category approach), Key study ethoxylated

Skin Corrosion/Irritation

Product: No data available.

Specified substance(s):

Ethanol, 2-butoxyin vivo (Rabbit): Irritating Experimental result, Key study

Alcohols, C12-15,

ethoxylated

in vivo (Rabbit): Not irritant Experimental result, Key study

Serious Eye Damage/Eye Irritation

Product: No data available.

Specified substance(s):

Rabbit, 24 - 72 hrs: Irritating Ethanol, 2-butoxy-

Alcohols, C12-15,

ethoxylated

Rabbit, 24 - 72 hrs: Not irritating

Sodium hydroxide

Corrosive

(Na(OH)) Rabbit, 2 d: 10% Sodium Hydroxide- Category 1; 0.5% Sodium Hydroxide-

Slightly irritating to eyes

Respiratory or Skin Sensitization

Product: No data available.

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Specified substance(s):

Ethanol, 2-butoxy- Skin sensitization:, in vivo (Guinea pig): Non sensitising Skin sensitization:, in vivo (Guinea pig): Non sensitising

ethoxylated

Carcinogenicity
Product:

No data available.

IARC Monographs on the Evaluation of Carcinogenic Risks to Humans:

No carcinogenic components identified

US. National Toxicology Program (NTP) Report on Carcinogens:

No carcinogenic components identified

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

No carcinogenic components identified

Germ Cell Mutagenicity

In vitro

Product: No data available.

In vivo

Product: No data available.

Reproductive toxicity

Product: No data available.

Specified substance(s):

Boric acid, sodium salt May cause adverse reproductive effects - such as infertility based on animal

data.

Specific Target Organ Toxicity - Single Exposure

Product: No data available.

Specific Target Organ Toxicity - Repeated Exposure

Product: No data available.

Aspiration Hazard

Product: No data available.

Other effects: No data available.

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

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Fish

Product: No data available.

Specified substance(s):

Ethanol, 2-butoxy-LC 50 (Oncorhynchus mykiss, 96 h): 1,474 mg/l Experimental result, Key

study

Benzenesulfonic acid. LC 50 (Catfish (Rita rita), 2 h): > 10 mg/l Mortality dodecyl-, sodium salt

LC 50 (Catfish (Rita rita), 4 h): > 10 mg/l Mortality

LC 50 (Catfish (Rita rita), 6 h): 9.136 - 10.098 mg/l Mortality LC 50 (Catfish (Rita rita), 8 h): 8.539 - 9.323 mg/l Mortality LC 50 (Catfish (Rita rita), 10 h): 8.381 - 9.262 mg/l Mortality

Alcohols, C12-15, ethoxylated

LC 50 (Oncorhynchus mykiss, 96 h): 2.4 mg/l Experimental result,

Supporting study

Sodium hydroxide

(Na(OH))

(1:1)

LC 50 (Western mosquitofish (Gambusia affinis), 96 h): 125 mg/l Mortality LC 50 (Gambusia affinis, 96 h): < 180 mg/l Experimental result, Supporting

study

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Ethanol, 2-butoxy-EC 50 (Daphnia magna, 48 h): 1,550 mg/l Experimental result, Key study

Benzenesulfonic acid. dodecyl-, sodium salt (1:1)

EC 50 (Water flea (Daphnia magna), 24 h): 12 mg/l Intoxication EC 50 (Water flea (Daphnia magna), 24 h): 17 mg/l Intoxication

EC 50 (Water flea (Ceriodaphnia dubia), 48 h): 3.26 - 14.51 mg/l Intoxication

LC 50 (Water flea (Moina macrocopa), 3 h): 2.1 mg/l Mortality LC 50 (Water flea (Ceriodaphnia dubia), 7 d): 19.87 mg/l Mortality

Alcohols, C12-15, ethoxylated

EC 50 (Daphnia magna, 48 h): 0.14 mg/l Experimental result, Key study

Sodium hydroxide (Na(OH))

EC 50 (Water flea (Ceriodaphnia dubia), 48 h): 34.59 - 47.13 mg/l

Intoxication

Chronic hazards to the aquatic environment:

Fish

Product: No data available.

Specified substance(s):

Ethanol, 2-butoxy-NOAEL (Danio rerio): > 100 mg/l Experimental result, Key study

Alcohols, C12-15, ethoxylated

NOAEL (Lepomis macrochirus): 0.33 mg/l Experimental result, Key study

Aquatic Invertebrates

Product: No data available.

Specified substance(s):

Ethanol, 2-butoxy-EC 50 (Daphnia magna): 297 mg/l Experimental result, Key study

EC 10 (Daphnia magna): 134 mg/l Experimental result, Key study

Toxicity to Aquatic Plants

Product: No data available.

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Specified substance(s):

Benzenesulfonic acid. EC 50 (Green algae (Chlamydomonas variabilis), 4 h): 3 mg/l Intoxication dodecyl-, sodium salt EC 50 (Green algae (Chlamydomonas variabilis), 4 h): 3.7 mg/l Intoxication EC 50 (Green algae (Chlamydomonas variabilis), 4 h): 4.1 mg/l Intoxication (1:1)

Persistence and Degradability

Biodegradation

Product: No data available.

Specified substance(s):

Ethanol, 2-butoxy-90.4 % Detected in water. Experimental result, Key study

Alcohols, C12-15, 72 % (28 d) Detected in water. Experimental result, Key study

ethoxylated

BOD/COD Ratio

Product: No data available.

Bioaccumulative potential

Bioconcentration Factor (BCF)

Product: No data available.

Specified substance(s):

Benzenesulfonic acid. Carp (Cyprinus carpio), Bioconcentration Factor (BCF): 400 (Not reported) dodecyl-, sodium salt Carp (Cyprinus carpio), Bioconcentration Factor (BCF): 16 (Not reported)

Bluegill (Lepomis macrochirus), Bioconcentration Factor (BCF): 94 (Flow (1:1)

through)

Bluegill (Lepomis macrochirus), Bioconcentration Factor (BCF): 220 (Flow

through)

Carp (Cyprinus carpio), Bioconcentration Factor (BCF): 9.7 - 16 (Static)

Pimephales promelas, Bioconcentration Factor (BCF): 237 Aquatic sediment Alcohols, C12-15, ethoxylated

Read-across from supporting substance (structural analogue or surrogate),

Key study

Partition Coefficient n-octanol / water (log Kow)

Product: No data available.

Specified substance(s):

Alcohols, C12-15,

ethoxylated

Log Kow: 2.03 - 6.24 No QSAR, Key study

Mobility in soil: No data available.

Known or predicted distribution to environmental compartments

Boric acid, sodium salt No data available. Ethanol, 2-butoxy-No data available. Benzenesulfonic acid, No data available.

dodecyl-, sodium salt (1:1)

Alcohols, C12-15, No data available.

ethoxylated

Sodium hydroxide (Na(OH)) No data available.

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Other adverse effects: Harmful to aquatic organisms.

13. Disposal considerations

Disposal instructions: Discharge, treatment, or disposal may be subject to national, state, or local

laws.

Contaminated Packaging: No data available.

14. Transport information

DOT

Not regulated.

IMDG

Not regulated.

IATA

Not regulated.

15. Regulatory information

US Federal Regulations

Restrictions on use: Not known.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

None present or none present in regulated quantities.

CERCLA Hazardous Substance List (40 CFR 302.4):

Chemical Identity Reportable quantity lbs. 1000

Benzenesulfonic acid, dodecyl-, sodium salt

(1:1)

Sodium hydroxide lbs. 1000

(Na(OH))

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories

Immediate (Acute) Health Hazards Delayed (Chronic) Health Hazard Serious Eye Damage/Eye Irritation

Toxic to reproduction

SARA 302 Extremely Hazardous Substance

None present or none present in regulated quantities.

SARA 304 Emergency Release Notification

Chemical Identity Reportable quantity

Ethanol, 2-butoxy-

acid, Benzenesulfonic lbs. 1000

sodium dodecyl-, salt

(1:1)

Sodium hydroxide lbs. 1000

(Na(OH))

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SARA 311/312 Hazardous Chemical

<u>Chemical Identity</u> <u>Threshold Planning Quantity</u>

Boric acid, sodium salt 10000 lbs Ethanol, 2-butoxy- 10000 lbs Benzenesulfonic acid, 10000 lbs

dodecyl-, sodium salt (1:1)

Alcohols, C12-15, 10000 lbs

ethoxylated

Sodium hydroxide 10000 lbs

(Na(OH))

SARA 313 (TRI Reporting)

Reporting Reporting threshold for manufacturing and

Chemical Identityother usersprocessingEthanol, 2-butoxy-N230 lbsN230 lbs.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130): Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3) US State Regulations

US. California Proposition 65

No ingredient requiring a warning under CA Prop 65.

US. New Jersey Worker and Community Right-to-Know Act

Chemical Identity

Boric acid, sodium salt

Ethanol, 2-butoxy-

Benzenesulfonic acid, dodecyl-, sodium salt (1:1)

US. Massachusetts RTK - Substance List

No ingredient regulated by MA Right-to-Know Law present.

US. Pennsylvania RTK - Hazardous Substances

Chemical Identity

Boric acid, sodium salt

Ethanol, 2-butoxy-

Benzenesulfonic acid, dodecyl-, sodium salt (1:1)

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

International regulations

Montreal protocol

Not applicable

Stockholm convention

Not applicable

Rotterdam convention

Not applicable

Kyoto protocol

Not applicable

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Inventory Status:

EINECS, ELINCS or NLP: Not in compliance with the inventory.

China Inv. Existing Chemical Substances: Not in compliance with the inventory.

Korea Existing Chemicals Inv. (KECI): Not in compliance with the inventory.

Canada NDSL Inventory: Not in compliance with the inventory.

Philippines PICCS: Not in compliance with the inventory.

New Zealand Inventory of Chemicals:

On or in compliance with the inventory

Japan ISHL Listing: Not in compliance with the inventory.

Japan Pharmacopoeia Listing: Not in compliance with the inventory.

Taiwan Chemical Substance Inventory: On or in compliance with the inventory

Australia AICS: On or in compliance with the inventory

Canada DSL Inventory List: On or in compliance with the inventory

Japan (ENCS) List: On or in compliance with the inventory

US TSCA Inventory: On or in compliance with the inventory

Mexico INSQ: On or in compliance with the inventory

Ontario Inventory: On or in compliance with the inventory

16.Other information, including date of preparation or last revision

Issue Date: 08/19/2019

Revision Information: No data available.

Version #: 1.0

Further Information: No data available.

Disclaimer: This information is provided without warranty. The information is believed to

be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.