Safety Data Sheet



Section 1: Identification of the Substance/Mixture and of the Company/Undertaking

1.1 Product identifier

Product Name

Dentsply Rinn Rapid Process Developer

Product Code

219406; 219436 - Developer

Product Description

Slightly yellow liquid, with mild odor.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Relevant identified use(s)

Professional dental photographic processing solution.

1.3 Details of the supplier of the safety data sheet

Manufacturer

PhotoSystems Inc.
 7200 Huron River Dr.

Dexter, MI 48130 United States

Telephone (General) _ 734-424-9625

1.4 Emergency telephone number

Manufacturer (Transportation) • 1-800-424-9300 - CHEMTREC

Section 2: Hazards Identification

EU/EEC

According to EU Directive 1272/2008 (CLP)/REACH 1907/2006 [amended by 453/2010] According to EU Directive 67/548/EEC (DSD) or 1999/45/EC (DPD)

2.1 Classification of the substance or mixture

CLP

Skin Sensitization 1 - H317
 Germ Cell Mutagenicity 2 - H341
 Carcinogenicity 2 - H351

Hazardous to the aquatic environment Acute 1 - H400

DSD/DPD

 Carcinogenic Substances - Category 3 Mutagenic Substances - Category 3

R40, R43, R68

2.2 Label Elements

CLP

WARNING





Hazard statements

H317 - May cause an allergic skin reaction

H341 - Suspected of causing genetic defects.

H351 - Suspected of causing cancer.

H400 - Very toxic to aquatic life

Precautionary statements

Prevention • P202 - Do not handle until all safety precautions have been read and understood.

P261 - Avoid breathing dust, fume, gas, mist, vapours and/or spray.

P273 - Avoid release to the environment.

P280 - Wear protective gloves and eye/face protection. P281 - Use personal protective equipment as required.

Response P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P363 - Wash contaminated clothing before reuse.

Storage/Disposal • P501 - Dispose of content and/or container in accordance with local, regional,

national, and/or international regulations.

DSD/DPD



Risk phrases . R40 - Limited evidence of a carcinogenic effect.

R43 - May cause sensitisation by skin contact.

R68 - Possible risk of irreversible effects.

Safety phrases • S24

S24 - Avoid contact with skin.

S37 - Wear suitable gloves.

S45 - In case of accident or if you feel unwell, seek medical advice immediately (show

the label where possible).

S61 - Avoid release to the environment. Refer to special instructions/ Safety Data

Sheets.

2.3 Other Hazards

• According to Regulation (EC) No. 1272/2008 (CLP) this material is considered

hazardous.

• According to European Directive 1999/45/EC this preparation is considered

dangerous.

UN GHS

According to Third Revised Edition

2.1 Classification of the substance or mixture

UN GHS

Skin Sensitization 1B - H317
 Germ Cell Mutagenicity 2 - H341

Hazardous to the aquatic environment Acute 2 - H401

2.2 Label elements

UN GHS

WARNING





Hazard statements

H317 - May cause an allergic skin reaction.

H341 - Suspected of causing genetic defects.

H401 - Toxic to aquatic life.

Precautionary statements

Prevention • P261 - Avoid breathing dust, fume, gas, mist, vapours and/or spray.

P281 - Use personal protective equipment as required.

P280 - Wear protective gloves and eye/face protection.

P202 - Do not handle until all safety precautions have been read and understood.

P273 - Avoid release to the environment.

Response • P302+P352 - IF ON SKIN: Wash with plenty of soap and water.

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.

P363 - Wash contaminated clothing before reuse.

Storage/Disposal • P501 - Dispose of content and/or container in accordance with local, regional,

national, and/or international regulations.

2.3 Other hazards

• According to the Globally Harmonized System for Classification and Labeling (GHS) this product is considered hazardous.

United States (US)

According to OSHA 29 CFR 1910.1200 HCS

2.1 Classification of the substance or mixture

OSHA HCS • Toxic

2.2 Label elements

OSHA HCS • Not required

2.3 Other hazards

• Under United States Regulations (29 CFR 1910.1200 - Hazard Communication Standard), this product is considered hazardous.

Canada

According to WHMIS

2.1 Classification of the substance or mixture

WHMIS

Very Toxic - D1A
 Other Toxic Effects - D2B

2.2 Label elements

WHMIS





Very Toxic - D1A
 Other Toxic Effects - D2B

2.3 Other hazards

WHMIS

 In Canada, the product mentioned above is considered hazardous under the Workplace Hazardous Materials Information System (WHMIS).

2.4 Other information

NFPA



See Section 12 for Ecological Information.

Section 3 - Composition/Information on Ingredients

3.1 Substances

 Material does not meet the criteria of a substance according to United Nations Globally Harmonized System of Classification and Labelling of Chemicals (GHS) Material does not meet the criteria of a substance in accordance with Regulation (EC) No 1272/2008.

3.2 Mixtures

		Ha	zardous Componer	nts	
Chemical Name	Identifiers	%(weight)	LD50/LC50	Classifications According to Regulation/Directive	Comments
Sodium sulfite	CAS:7757-83-7 EC Number:231- 821-4	1% TO 5%	Ingestion/Oral-Rat LD50 · 3560 mg/kg	UN GHS: Acute Tox. 5 EU DSD/DPD:NDA EU CLP:NDA	NDA
Hydroquinone	CAS:123-31-9 EC Number:204- 617-8 UN:UN2662 (solid), UN3435 (solution)	1% TO 3%	Ingestion/Oral-Rat LD50 · 302 mg/kg Skin-Rabbit LD50 · >2000 mg/kg 24 Hour (s)	UN GHS: Acute Tox 5-Dermal; Acute tox 4-Oral; Eye Irrit. 2A; Skin Irrit. 2; Aquatic Acute 1; EU DSD/DPD: Annex I - Xn; R22 Carc.Cat.3; R40 Xi; R41 R43 N; R50 Muta.Cat.3; R68 EU CLP: Annex VI - Carc. 2-H351; Muta. 2-H341; Acute Tox. 4-H302; Eye Dam. 1-H318; ;Skin Sens. 1-H317; Aquatic Acute 1-H400;	NDA
Sodium hydroxide	CAS:1310-73-2 EC Number:215- 185-5 UN:UN1823 (solid), UN1824 (solution)	1% TO 3%	NDA	UN GHS: Skin Corr. 1A; Eye Dam. 1A EU DSD/DPD: Annex I - C; R35 EU CLP: Annex VI - Skin Corr 1A-H314	NDA
Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	CAS:64-02-8 EC Number:200- 573-9	< 1%	Ingestion/Oral-Rat LD50 · 10 g/kg	UN GHS: Eye Irrit. 2A; Skin Irrit. 2; EU DSD/DPD: Annex I - Xn; R22 Xi; R41 EU CLP: Annex VI - Acute Tox 4*-H302; Eye Dam 1-H318	NDA

See Section 11 for Toxicological Information.

Section 4 - First Aid Measures

4.1 Description of first aid measures

Inhalation

Move victim to fresh air. Administer oxygen if breathing is difficult. Give artificial respiration if victim is not breathing. If signs/symptoms develop, get medical attention.

Skin

• In case of contact with substance, immediately flush skin with running water for at least 20 minutes. Remove and isolate contaminated clothing and shoes. If signs/symptoms develop, get medical attention.

Eye

• In case of contact with substance, immediately flush eyes with running water for at least 20 minutes. If signs/symptoms develop, get medical attention.

Ingestion

 First aid is not expected to be necessary if material is used under ordinary conditions and as recommended. If swallowed, seek medical advice immediately and show this container or label.

4.2 Most important symptoms and effects, both acute and delayed

Refer to Section 11 - Toxicological Information.

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician

 No special treatment necessary. If adverse effects occur treat symptomatically and supportively.

Section 5 - Firefighting Measures

5.1 Extinguishing media

Suitable Extinguishing Media .

Material is non-combustible. In case of fire use media as appropriate for surrounding fire

Unsuitable Extinguishing Media

None known.

5.2 Special hazards arising from the substance or mixture

Unusual Fire and Explosion Hazards

Material is non-combustible and is not expected to pose a fire or explosion hazard.

Hazardous Combustion Products

Carbon monoxide, carbon dioxide, oxides of sulfur.

5.3 Advice for firefighters

Structural firefighters' protective clothing will only provide limited protection.
 Wear positive pressure self-contained breathing apparatus (SCBA).

Section 6 - Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions

 Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate enclosed areas. Avoid contact with skin and eyes.

Emergency Procedures

 As an immediate precautionary measure, isolate spill or leak area for at least 50 meters (150 feet) in all directions. Stay upwind. Stop leak if you can do it without risk.

6.2 Environmental precautions

Avoid run off to waterways and sewers.

6.3 Methods and material for containment and cleaning up

Containment/Clean-up Measures

 SMALL SPILLS: Take up with sand or other non -combustible absorbent material and place into containers for later disposal.
 LARGE SPILLS: Dike far ahead of liquid spill for later disposal.

6.4 Reference to other sections

 Refer to Section 8 - Exposure Controls/Personal Protection and Section 13 - Disposal Considerations.

Section 7 - Handling and Storage

7.1 Precautions for safe handling

Handling

Use good safety and industrial hygiene practices. Use only in well ventilated areas.
 Avoid contact with eyes, skin, and clothing. Do not breathe (dust, vapor or spray mist)
 Wash thoroughly after handling.

7.2 Conditions for safe storage, including any incompatibilities

Storage

Keep away from incompatible materials. Store in a cool/low-temperature, well-ventilated place. Do not store or consume food, drink, or tobacco where they may become contaminated with this material.

Incompatible Materials or Ignition Sources

Keep away from strong acids.

7.3 Specific end use(s)

Refer to Section 1.2 - Relevant identified uses.

Section 8 - Exposure Controls/Personal Protection

8.1 Control parameters

Exposure Limits/Guidelines								
	Result	ACGIH	Canada Ontario	Canada Quebec	China	NIOSH		
	STELs	Not established	Not established	Not established	2 mg/m3 STEL	Not established		
Hydroquinone	TWAs	1 mg/m3 TWA	2 mg/m3 TWAEV	2 mg/m3 TWAEV	1 mg/m3 TWA	Not established		
(123-31-9)	Ceilings	Not established	Not established	Not established	Not established	2 mg/m3 Ceiling (15 min)		
Sodium hydroxide (1310-73-2)	Ceilings	2 mg/m3 Ceiling	2 mg/m3 CEV	2 mg/m3 Ceiling	2 mg/m3 MAC	2 mg/m3 Ceiling		
		E	xposure Limits/Gu	iidelines (Con't.)				
			Result	OSHA				
Hydroquinone (123-31-9)		TWAs	TWAs 2 mg/m3 TWA					
Sodium hydroxide (1310-73-2)			TWAs	2 mg/m3 TWA				

8.2 Exposure controls

Engineering Measures/Controls

 Good general ventilation 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.

Personal Protective Equipment

Pictograms





Respiratory

Eye/Face Hands Skin/Body

General Industrial Hygiene Considerations
Environmental Exposure Controls

 Under normal conditions of use, no respiratory protection is anticipated to be necessary. If use conditions do not maintain vapors or fumes below exposure limits use suitable respiratory equipment. Respirator type: full-face organic vapor/N95.

- Wear splash goggles or safety glasses with side shields.
- Wear appropriate gloves.
- Wear impervious gloves and protective clothing suitable for the risk of exposure.
- Do not get in eyes or on skin or clothing. Handle in accordance with good industrial hygiene and safety practice.
- Avoid release to the environment.

Key to abbreviations

ACGIH = American Conference of Governmental Industrial Hygiene

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

CEV = Ceiling exposure value; is the maximum airborne concentration of a biological or chemical agent to which a worker is exposed at any time

STEL = Short Term Exposure Limits are based on 15-minute exposures

TWAEV = Time-Weighted Average Exposure Value

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures

Preparation Date: 27/February/2012 Revision Date: 13/March/2012

Section 9 - Physical and Chemical Properties

9.1 Information on Physical and Chemical Properties

Material Description			
Physical Form	Liquid	Appearance/Description	Slightly yellow liquid, with mild odor.
Color	Slight yellow.	Odor	Mild odor.
Taste	No data available	Particulate Type	No data available
Particulate Size	No data available	Aerosol Type	No data available
Odor Threshold	No data available	Physical and Chemical Properties	No data available
General Properties			
Boiling Point	> 100 C(> 212 F)	Melting Point	No data available
Decomposition Temperature	No data available	Heat of Decomposition	No data available
рН	11.15	Specific Gravity/Relative Density	1.08 Water=1
Density	9 lbs/gal	Bulk Density	No data available
Water Solubility	Soluble	Solvent Solubility	No data available
Viscosity	No data available	Explosive Properties	No data available
Oxidizing Properties:	No data available		
Volatility		•	
Vapor Pressure	18 mmHg (torr)	Vapor Density	1.08
Evaporation Rate	No data available	VOC (Wt.)	0.06 lbs/gal
VOC (Vol.)	No data available	Volatiles (Wt.)	89.5 %
Volatiles (Vol.)	No data available		
Flammability		•	
Flash Point	Not relevant Material is not combustible.	Flash Point Test Type	Not relevant Material is not combustible.
UEL	Not relevant	LEL	Not relevant
Autoignition	No data available	Self-Accelerating Decomposition Temperature (SADT)	No data available
Heat of Combustion (ΔHc)	No data available	Burning Time	No data available
Flame Duration	No data available	Flame Height	No data available
Flame Extension	No data available	Ignition Distance	No data available
Flammability (solid, gas)	No data available		
Environmental			
Half-Life	No data available	Octanol/Water Partition coefficient	No data available
Coefficient of water/oil distribution	No data available	Bioaccumulation Factor	No data available
Bioconcentration Factor	No data available	Biochemical Oxygen Demand BOD/BOD5	No data available
Chemical Oxygen Demand	No data available	Persistence	No data available
Degradation	No data available		

9.2 Other Information

Preparation Date: 27/February/2012 Revision Date: 13/March/2012 No additional physical and chemical parameters noted.

Section 10: Stability and Reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

Stable

10.3 Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4 Conditions to avoid

. None known.

10.5 Incompatible materials

• |[241]|

10.6 Hazardous decomposition products

• Carbon dioxide and carbon monoxide and oxides of sulfur.

Section 11 - Toxicological Information

11.1 Information on toxicological effects

Component Name	CAS	Data
Sodium sulfite (1% TO 5%)	7757-83-7	Acute Toxicity: orl-rat LD50:3560 mg/kg
Hydroquinone (1% TO 3%)	123-31-9	Acute Toxicity: orl-rat LD50:320 mg/kg; skn-rbt LD50:>2000 mg/kg/24H; Irritation: skn-hmn 5% SEV; Reproductive: orl-rat TDLo:667 mg/kg (11D preg); Tumorigen/Carcinogen: orl-mus TDLo:25750 mg/kg/103W-l
Sodium hydroxide (1% TO 3%)	1310-73-2	Acute Toxicity: skn-rbt TCLo:25 pph; Irritation: eye-rbt 50 ug/24H SEV; skn-rbt 500 mg/24H SEV
Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt (< 1%)	64-02-8	Acute Toxicity: orl-rbt LD50:7 gm/kg; Irritation: eye-rbt 100 mg/24H MOD; skn-rbt 500 mg/24H MOD

GHS Properties	Classification
Acute toxicity	EU/CLP • Classification criteria not met UN GHS • Classification criteria not met
Skin corrosion/Irritation	EU/CLP • Classification criteria not met UN GHS • Classification criteria not met
Serious eye damage/Irritation	EU/CLP • Classification criteria not met UN GHS • Classification criteria not met
Skin sensitization	EU/CLP • Skin Sensitizer 1 UN GHS • Skin Sensitizer 1B
Respiratory sensitization	EU/CLP • Classification criteria not met UN GHS • Classification criteria not met
Aspiration Hazard	EU/CLP • Classification criteria not met UN GHS • Classification criteria not met
Carcinogenicity	EU/CLP • Carcinogenicity 2 UN GHS • Classification criteria not met

Preparation Date: 27/February/2012

Revision Date:

Germ Cell Mutagenicity	EU/CLP • Germ Cell Mutagenicity 2 UN GHS • Germ Cell Mutagenicity 2
Toxicity for Reproduction	EU/CLP • Classification criteria not met UN GHS • Classification criteria not met
STOT-SE	EU/CLP • Classification criteria not met UN GHS • Classification criteria not met
STOT-RE	EU/CLP • Classification criteria not met UN GHS • Classification criteria not met

Potential Health Effects

Inhalation

Acute (Immediate)

Chronic (Delayed)

- Under normal conditions of use, no health effects are expected.
- No data available.

Skin

Acute (Immediate)

Chronic (Delayed)

- May cause skin sensitization. Symptoms include redness, and skin rash.
- No data available.

Eye

Acute (Immediate)

Chronic (Delayed)

- Under normal conditions of use, no health effects are expected.
- No data available.

Ingestion

Acute (Immediate)

Chronic (Delayed)

Mutagenic Effects

Carcinogenic Effects

- Under normal conditions of use, no health effects are expected.
- No data available.
- Repeated and prolonged exposure may cause mutagenic effects.
- Hydroquinone has been classified as a Category 3 mutagen and carcinogen by the European Union based upon testing rats and mice given hydroquinone by stomach tube or at high dietary levels. The International Agency for Research on Cancer (IARC) under ranking for cancer potential has classified hydroquinone in Group 3, i.e. "not classifiable as a carcinogen.

	Carcinogenic Effects						
	CAS IARC NTP						
Hydroquinone	123-31-9	Group 3-Not Classifiable	Evidence of Carcinogenicity				

Section 12 - Ecological Information

12.1 Toxicity

Dents	ply Rinn Rapid Process Dev	eloper			
Dosage	Species	Duration	Results	Exposure Conditions	Comments
= 0.15 mg/L	Crustacea: Daphnia magna	48 Hour(s)	EC50	NDA	for Hydroquinone component

 Aquatic toxicity of the material has not been tested. This material does contain hydroquinone. The Classifications of this material are determined according to UN GHS and EU CLP criteria for classification of untested mixtures and are based on hydroquinone.

12.2 Persistence and degradability

Data lacking.

12.3 Bioaccumulative potential

Data lacking.

12.4 Mobility in Soil

Revision Date: 13/March/2012

Data lacking.

12.5 Results of PBT and vPvB assessment

PBT and vPvB assessment has not been carried out.

12.6 Other adverse effects

No studies have been found.

Section 13 - Disposal Considerations

13.1 Waste treatment methods

Product waste

• Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. Working solution: Waste material is currently classified as hazardous under Council Directive 91/689/EEC. The European Waste Catalogue Code is 09 01 01 Water based developer and activator. The preferred options for disposal are to send to licensed reclaimers, or to permitted incinerators. Any disposal practice must be in compliance with federal, state, and local regulations. Do not dump into sewers, ground, or any body of water.

Packaging waste

Dispose of content and/or container in accordance with local, regional, national, and/or international regulations. Triple rinse with water. Waste product packaging may be consigned for recovery or disposal as non hazardous waste. Whenever possible, minimize waste by using the rinse water to make up the working solution. The European Waste Catalogue Code is 15 01 02 plastic packaging. Waste product packaging contaminated by residues of hazardous contents should be consigned for disposal as hazardous waste. In this instance, the European Waste Catalogue Code is 15 01 10 packaging containing residues of or contaminated by dangerous substances.

Section 14 - Transport Information

	14.1 UN number	14.2 UN proper shipping name	14.3 Transport hazard class(es)	14.4 Packing group	14.5 Environmental hazards
DOT	NDA	Not Regulated	NDA	NDA	NDA
TDG	NDA	Not Regulated	NDA	NDA	NDA
IMO/IMDG	NDA	Not Regulated	NDA	NDA	NDA
IATA/ICAO	NDA	Not Regulated	NDA	NDA	NDA

14.6 Special precautions for • None known. user

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

This product is provided only in non-bulk containers.

14.8 Other information

DOT • Hydroquinone has a reportable quantity of 100 pounds (45.4 kg).

Section 15 - Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

SARA Hazard Classifications . Acute

State Right To Know									
Component CAS MA NJ PA									
									

Water	7732-18-5	No	No	No
Sodium sulfite	7757-83-7	No	No	No
Hydroquinone	123-31-9	Yes	Yes	Yes
Sodium hydroxide	1310-73-2	Yes	Yes	Yes
Acetic acid, (ethylenedinitrilo) tetra-, tetrasodium salt	64-02-8	No	No	No

					Inventory				
Component	CAS	S	Canada D	SL	Canada NDSL	China	EU EINE	ECS	EU ELNICS
Water	7732-18	3-5	Yes		No	Yes	Yes		No
Sodium sulfite	7757-83	3-7	Yes		No	Yes	Yes		No
Hydroquinone	123-31-	.9	Yes		No	Yes	Yes		No
Sodium hydroxide	1310-73	3-2	Yes		No	Yes	Yes		No
Acetic acid, (ethylenedinitrilo) tetra-, tetrasodium salt	64-02-8	}	Yes		No	Yes	Yes		No
					Inventory (Cor	า't.)			
Component		0	CAS	Ja	pan ENCS	Korea KECL			TSCA
Water		7732	-18-5		No	Yes			Yes
Sodium sulfite		7757	-83-7	Yes Yes		Yes		Yes	
Hydroquinone		123-3	31-9		Yes	Yes		Yes	
Sodium hydroxide		1310	-73-2		Yes	Yes		Yes	
Acetic acid, (ethylenedinitrilo) tetra-, tetrasodium salt		64-02	8		Yes	Yes			Yes

Australia

Labor

Australia - Hazardous Substances - Substances Requiring Health Surveillance

Sodium sulfite
 Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt
 Hydroquinone
 Sodium hydroxide
 Water
 1% TO 5%
 Hyd TO 5%
 Not Listed
 Water
 7732-18-5
 80% TO 90%
 Not Listed

Australia - High Volume Industrial Chemicals List

Sodium sulfite
 Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt
 Hydroquinone
 Sodium hydroxide
 Water
 1% TO 5%
 44-02-8
 1% TO 3%
 Not Listed
 Not Listed
 Not Listed
 80% TO 90%
 Not Listed
 Not Listed

Australia - List of Designated Hazardous Substances - Classification

Sodium sulfite
 Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium
 salt
 7757-83-7
 1% TO 5%
 Not Listed
 64-02-8
 1%
 Xn, Xi R22, R41

Xn, Xi, N Carc.Cat.3, Muta.Cat.3 R40, R68, R22, R41, R43, • Hydroquinone 123-31-9 1% TO 3% R50 • Sodium hydroxide C R35 1310-73-2 1% TO 3% Water 7732-18-5 80% TO 90% Not Listed

Environment

Australia - National Pollutant Inventory (NPI) Subs	tance List		
Sodium sulfite	7757-83-7	1% TO 5%	Not Listed
Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	64-02-8	< 1%	Not Listed
Hydroquinone	123-31-9	1% TO 3%	Not Listed
 Sodium hydroxide 	1310-73-2	1% TO 3%	Not Listed
Water	7732-18-5	80% TO 90%	Not Listed
Australia - Ozone Protection Act - Scheduled Subs	stances		
Sodium sulfite	7757-83-7	1% TO 5%	Not Listed
Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	64-02-8	< 1%	Not Listed
Hydroquinone	123-31-9	1% TO 3%	Not Listed
Sodium hydroxide	1310-73-2	1% TO 3%	Not Listed
Water	7732-18-5	80% TO 90%	Not Listed
Australia - Priority Existing Chemical Program			
 Sodium sulfite 	7757-83-7	1% TO 5%	Not Listed
Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	64-02-8	< 1%	Not Listed
Hydroquinone	123-31-9	1% TO 3%	Candidate chemical

1310-73-2 1% TO 3%

7732-18-5 80% TO 90% Not Listed

Not Listed

Belgium

Water

• Sodium hydroxide

Labor

Dalaina C	N I 4	I D		0 !	B. B. B 4	
Belalum - S	bubstances	and Preb	arations .	- Carcinogen	s and wutao	ens

g	900		
Sodium sulfite	7757-83-7	1% TO 5%	Not Listed
• Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	64-02-8	< 1%	Not Listed
Hydroquinone	123-31-9	1% TO 3%	Not Listed
Sodium hydroxide	1310-73-2	1% TO 3%	Not Listed
Water	7732-18-5	80% TO 90%	Not Listed

Canada

Labor

 Sodium sulfite 	7757-83-7	1% TO 5%	Uncontrolled product according to WHMIS classification criteria
• Acetic acid, (ethylenedinitrilo) tetra-, tetrasodium salt	64-02-8	< 1%	D2B (including 39%, 50%)
 Hydroquinone 	123-31-9	1% TO 3%	D1B, D2B
			E (including 0.04% in aqueous solution, 0.08%, 0.4% in aqueous solution, 2%
Sodium hydroxide	1310-73-2	1% TO 3%	2.5%, 4% in aqueous solution, 5%, 10%, 16%, 20%, 40%, 50% in aqueous solution, 8.7N)
Water	7732-18-5	80% TO 90%	Uncontrolled product according to WHMIS classification criteria

Sodium sulfite	7757-83-7	1% TO 5%	Not Listed
• Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	64-02-8	< 1%	Not Listed
 Hydroquinone 	123-31-9	1% TO 3%	1 %

Sodium hydroxide	1310-73-2 1% TO 3% 1 %
• Water	7732-18-5 80% TO 90% Not Listed

Environment

Canada - CEPA - Priority Substances List

Sodium sulfite	7757-83-7	1% TO 5%	Not Listed
• Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	64-02-8	< 1%	Not Listed
Hydroquinone	123-31-9	1% TO 3%	Not Listed
Sodium hydroxide	1310-73-2	1% TO 3%	Not Listed
• Water	7732-18-5	80% TO 90%	Not Listed

Hong Kong

-Labor

Hong Kong - Dangerous Substances Regulations - Classification

 Sodium sulfite 	7757-83-7	1% TO 5%	Not Listed
 Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt 	64-02-8	< 1%	Not Listed
Hydroquinone	123-31-9	1% TO 3%	Not Listed
Sodium hydroxide	1310-73-2	1% TO 3%	Corrosive (anhydrous or solution, >5% sodium hydroxide); Irritant (solution, 1-5%)
Water	7732-18-5	80% TO 90%	Not Listed

India

Environment -

India - Hazardous Chemical Rules - List of Hazardous and Toxic Chemicals

• Sodium sulfite 7757-83-7 1% TO 5% Not Listed • Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt 64-02-8 < 1% Not Listed • Hydroquinone 123-31-9 1% TO 3% • Sodium hydroxide 1310-73-2 1% TO 3% Water 7732-18-5 80% TO 90% Not Listed

Mexico

Other

Mexico -	Hazard	Classifications
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Sodium sulfite	7757-83-7	1% TO 5%	Not Listed
• Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	64-02-8	< 1%	Not Listed
Hydroquinone	123-31-9	1% TO 3%	Class = 6.1
Sodium hydroxide	1310-73-2	1% TO 3%	Class = 8 UN1823, UN1824

Water 7732-18-5 80% TO 90% Not Listed

Mexico - Regulated Substances

•	Sodium sulfite	7757-83-7	1% TO 5%	Not Listed
•	Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	64-02-8	< 1%	Not Listed
•	Hydroquinone	123-31-9	1% TO 3%	UN2662
•	Sodium hydroxide	1310-73-2	1% TO 3%	UN1824 (solution); UN1823

23 (solid)

7732-18-5 80% TO 90% Not Listed Water

Netherlands

Other:

Netherlands - List of Carcinogens

Sodium sulfite	7757-83-7	1% TO 5%	Not Listed
• Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	64-02-8	< 1%	Not Listed
Hydroquinone	123-31-9	1% TO 3%	Not Listed
Sodium hydroxide	1310-73-2	1% TO 3%	Not Listed
Water	7732-18-5	80% TO 90%	Not Listed

United Kingdom

−Other

United Kingdom - Workplace Exposure Lim	its (WELs) - Substances in Review
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Sodium sulfite	7757-83-7	1% TO 5%	Not Listed
• Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	64-02-8	< 1%	Not Listed
Hydroquinone	123-31-9	1% TO 3%	Not Listed
Sodium hydroxide	1310-73-2	1% TO 3%	Not Listed
Water	7732-18-5	80% TO 90%	Not Listed

United States

Labor -

U.S. - OSHA - Process Safety Management - Highly Hazardous Chemicals

•	Sodium sulfite	7757-83-7	1% TO 5%	Not Listed
• /	Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	64-02-8	< 1%	Not Listed
•	Hydroquinone	123-31-9	1% TO 3%	Not Listed
• ;	Sodium hydroxide	1310-73-2	1% TO 3%	Not Listed
• 1	Water	7732-18-5	80% TO 90%	Not Listed

U.S. - OSHA - Specifically Regulated Chemicals

7757-83-7	1% TO 5%	Not Listed
64-02-8	< 1%	Not Listed
123-31-9	1% TO 3%	Not Listed
1310-73-2	1% TO 3%	Not Listed
7732-18-5	80% TO 90%	Not Listed
	64-02-8 123-31-9 1310-73-2	7757-83-7 1% TO 5% 64-02-8 < 1% 123-31-9 1% TO 3% 1310-73-2 1% TO 3% 7732-18-5 80% TO 90%

Environment

U.S. - CAA (Clean Air Act) - 1990 Hazardous Air Pollutants

•	Sodium sulfite	7757-83-7	1% TO 5%	Not Listed
•	Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	64-02-8	< 1%	Not Listed
•	Hydroquinone	123-31-9	1% TO 3%	
•	Sodium hydroxide	1310-73-2	1% TO 3%	Not Listed
•	Water	7732-18-5	80% TO 90%	Not Listed

U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities

Sodium sulfite	7757-83-7	1% TO 5%	Not Listed
• Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	64-02-8	< 1%	Not Listed
Hydroquinone	123-31-9	1% TO 3%	100 lb final RQ; 45.4 kg final RQ
Sodium hydroxide	1310-73-2	1% TO 3%	1000 lb final RQ; 454 kg final RQ
Water	7732-18-5	80% TO 90%	Not Listed

U.S. - CERCLA/SARA - Radionuclides and Their Reportable Quantities

•	Sodium sulfite	7757-83-7	1% TO 5%	Not Listed
•	Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	64-02-8	< 1%	Not Listed
•	Hydroquinone	123-31-9	1% TO 3%	Not Listed
•	Sodium hydroxide	1310-73-2	1% TO 3%	Not Listed
•	Water	7732-18-5	80% TO 90%	Not Listed

Preparation Date: 27/February/2012 Revision Date: 13/March/2012

Sodium sulfite	7757-83-7	1% TO 5%	Not Listed
• Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	64-02-8	< 1%	Not Listed
Hydroquinone	123-31-9	1% TO 3%	100 lb EPCRA RQ
Sodium hydroxide	1310-73-2	1% TO 3%	Not Listed
Water	7732-18-5	80% TO 90%	Not Listed
U.S CERCLA/SARA - Section 302 Extremely Haza	rdous Subs	tances TPQs	
Sodium sulfite	7757-83-7	1% TO 5%	Not Listed
• Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	64-02-8	< 1%	Not Listed
Hydroquinone	123-31-9	1% TO 3%	500 lb lower TPQ; 10000 lb upper TPQ
Sodium hydroxide	1310-73-2	1% TO 3%	Not Listed
Water	7732-18-5	80% TO 90%	Not Listed
J.S CERCLA/SARA - Section 313 - Emission Repo	orting		
Sodium sulfite	7757-83-7	1% TO 5%	Not Listed
• Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	64-02-8	< 1%	Not Listed
Hydroquinone	123-31-9	1% TO 3%	1.0 % de minimis concentration
Sodium hydroxide	1310-73-2	1% TO 3%	Not Listed
• Water	7732-18-5	80% TO 90%	Not Listed
U.S CERCLA/SARA - Section 313 - PBT Chemical	Listing		
Sodium sulfite	7757-83-7	1% TO 5%	Not Listed
• Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	64-02-8	< 1%	Not Listed
Hydroquinone	123-31-9	1% TO 3%	Not Listed
Sodium hydroxide	1310-73-2	1% TO 3%	Not Listed

United States - California

invironment			
U.S California - Proposition 65 - Carcinogens Lis	st		
Sodium sulfite		1% TO 5%	Not Listed
Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	64-02-8	< 1%	Not Listed
Hydroquinone	123-31-9	1% TO 3%	Not Listed
Sodium hydroxide	1310-73-2	1% TO 3%	Not Listed
Water	7732-18-5	80% TO 90%	Not Listed
U.S California - Proposition 65 - Developmental 1	Toxicity		
Sodium sulfite	7757-83-7	1% TO 5%	Not Listed
• Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	64-02-8	< 1%	Not Listed
Hydroquinone	123-31-9	1% TO 3%	Not Listed
 Sodium hydroxide 	1310-73-2	1% TO 3%	Not Listed
• Water	7732-18-5	80% TO 90%	Not Listed
U.S California - Proposition 65 - Maximum Allow	able Dose	Levels (MADL	.)
 Sodium sulfite 	7757-83-7	1% TO 5%	Not Listed
 Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt 	64-02-8	< 1%	Not Listed
Hydroquinone	123-31-9	1% TO 3%	Not Listed
Sodium hydroxide	1310-73-2	1% TO 3%	Not Listed
Water	7732-18-5	80% TO 90%	Not Listed
U.S California - Proposition 65 - No Significant Ri	sk Levels (I	NSRL)	
Sodium sulfite	-	1% TO 5%	Not Listed

A notic acid (athylanodinitrila)tatra tatracadium calt	64-02-8	< 1%	Not Listed
Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt			
Hydroquinone	123-31-9	1% TO 3%	Not Listed
Sodium hydroxide	1310-73-2	1% TO 3%	Not Listed
Water	7732-18-5	80% TO 90%	Not Listed
U.S California - Proposition 65 - Reproductive To	oxicity - Fen	nale	
Sodium sulfite	7757-83-7	1% TO 5%	Not Listed
Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	64-02-8	< 1%	Not Listed
 Hydroquinone 	123-31-9	1% TO 3%	Not Listed
Sodium hydroxide	1310-73-2	1% TO 3%	Not Listed
Water	7732-18-5	80% TO 90%	Not Listed
U.S California - Proposition 65 - Reproductive To	xicity - Male	9	
Sodium sulfite	7757-83-7	1% TO 5%	Not Listed
• Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	64-02-8	< 1%	Not Listed
Hydroquinone	123-31-9	1% TO 3%	Not Listed
Sodium hydroxide	1310-73-2	1% TO 3%	Not Listed
Water	7732-18-5	80% TO 90%	Not Listed

United States - Pennsylvania

Labor

U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List

	Sodium sulfite	7757-83-7	1% TO 5%	Not Listed
•	Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	64-02-8	< 1%	Not Listed
•	Hydroquinone	123-31-9	1% TO 3%	
•	Sodium hydroxide	1310-73-2	1% TO 3%	
•	Water	7732-18-5	80% TO 90%	Not Listed

U.S. - Pennsylvania - RTK (Right to Know) - Special Hazardous Substances

•	Sodium sulfite	7757-83-7	1% TO 5%	Not Listed
•	Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	64-02-8	< 1%	Not Listed
•	Hydroquinone	123-31-9	1% TO 3%	Not Listed
•	Sodium hydroxide	1310-73-2	1% TO 3%	Not Listed
•	Water	7732-18-5	80% TO 90%	Not Listed

United States - Rhode Island

Labor

U.S. - Rhode Island - Hazardous Substance List

Sodium sulfite	7757-83-7	1% TO 5%	Not Listed
• Acetic acid, (ethylenedinitrilo)tetra-, tetrasodium salt	64-02-8	< 1%	Not Listed
Hydroquinone	123-31-9	1% TO 3%	Toxic
Sodium hydroxide	1310-73-2	1% TO 3%	Toxic; Flammable
147.4	7700 40 5	000/ TO 000/	A1 (11 ()

Water 7732-18-5 80% TO 90% Not Listed

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out.

15.3 Other Information

• WARNING: This product contains a chemical known to the State of California to cause cancer.

Section 16 - Other Information

Last Revision Date
Preparation Date
Disclaimer/Statement of
Liability

- 13/March/2012
- 27/February/2012
- The information contained herein is based on the data available to us and is believed to be accurate. However, no warranty is expressed or implied regarding the accuracy of this data or the results to be obtained from the use thereof. We assume no responsibility for the injuries from the use of the product described herein.