

Doc. ID: 300-7664 Rev. AC Revised (year/month/day) 2015/03/30

Section 1 Identification of the Substance/mixture and of the Company/undertaking

Product Identifier

Product Name Iris System Cleanser

800-3203 **Part Number Series Name** iQ® 200

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

For In Vitro Diagnostic Use. See product literature for details. **Product Use**

1.3 Details of the supplier of the safety data sheet

> Manufacturer **EC REP Address**

IRIS International, Inc. mdi Europa GmbH 9172 Eton Avenue Langenhagener Str. 71 30855 Hannover-Langenhagen

Chatsworth, CA 91311-5874, U.S.A.

Tel: 800-776-4747 Germany

+49-511-39089530 818-527-7000

e-mail address contactIDD@beckman.com

1.4 **Emergency telephone number**

> Chemtrec Emergency Tel No. U.S.A. 800-424-9300, International (001) Telephone number (24H)

> > 703-527-3887

Distributor and Emergency Phone No.

(800) 776-4747

Section 2 Hazards Identification

2.1 Classification of substance or mixture

Product Description Mixture

Pale yellow; Clear; Liquid; Bleach odor

Classification according to EC 1272/2008 (CLP/GHS)

Skin Corrosion Category 1 Eye Damage Category 1

Classification according to EC Directives 1999/45/EC and 67/548/EEC

Not classified as dangerous per EC Directives (1999/45/EC and 67/548 EEC)



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Section 2 Hazards Identification (Continued)

Classification according to US-OSHA (HCS 29 CFR 1910.1200) and UN GHS

Skin Corrosion Category 1
Eye Damage Category 1

Aquatic Hazard Acute, Category 2

2.2 Label Elements

According to EC 1272/2008 (CLP/GHS), US-OSHA and UN GHS

Hazardous Ingredients

Sodium Hydroxide Sodium Hypochlorite

Pictogram



Signal Word

DANGER

Hazard Statements

H314 Causes severe skin burns and eye damage.

H401 Toxic to aquatic life

Precautionary Statements

P273 Avoid release to the environment.

P280 Wear protective gloves, protective clothing and eye/face protection.

P301+P330+P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303+P361+P353 IF ON SKIN (or hair): Rinse skin with water.

P304+P340 IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P310 Immediately call a POISON CENTER or doctor/physician.

P363 Wash contaminated clothing before reuse.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/national regulations

Product label will display most significant precautionary statements.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable. vPvB: Not applicable.

See Section 11 Toxicological Information for more detailed health information.

Section 3 Composition and Information on Ingredients

3.2 Mixtures Hazardous Ingredients: Chemical Name We by wt. Hazard Classification of Pure Ingredients EU-67/548/EEC EU 1272/2008 CLP/GHS GHS



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Section 3 Composition and Information on Ingredients (Continued)

Sodium Hypochlorite CAS # 7681-52-9 EINECS # 231-668-3 Index # 017-011-00-1	1 - 5	C;R31-34 N;R50	Aquatic Acute 1 Eye Dam. 1 Skin Corr. 1B H314; H318; H400	Aquatic Acute 1 Eye Dam. 1 Skin Corr. 1B H314; H318; H400	
Sodium Hydroxide CAS # 1310-73-2 EINECS # 215-185-5 Index # 011-002-00-6	0.1 - 1	C;R 35	Eye Dam. 1 Skin Corr. 1A H314; H318	Eye Dam. 1 Skin Corr. 1A H314; H318	

See section 8 for available Occupational exposure limits

See Section 15 for additional regulatory information

See Section 16 for hazard class, hazard statements and risk phrase description

Section 4 First Aid Measures

4.1 Description of first aid measures

Inhalation If product is inhaled, move exposed individual to fresh air. If individual is not

breathing, begin artificial respiration immediately and obtain medical attention.

Eye Contact If product enters eyes, wash eyes gently under running water for 15 minutes or

longer, making sure that the eyelids are held open and obtain medical attention

immediately.

Skin Contact In case of skin contact, flush with copious amounts of water for at least 15

minutes. If pain or irritation occur, obtain medical attention.

Ingestion If ingested, wash mouth out with water. If irritation or discomfort occurs, seek

medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Causes severe skin burns and eye damage.

See Section 11 Toxicological Information for more detailed health information.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

Section 5 Fire Fighting Measures

Flammable Properties Nonflammable aqueous solution.

5.1 Extinguishing Media In case of fire use carbon dioxide (CO2), dry chemical, water spray or foam.

For large fires use extinguishing media suitable for surrounding fire.

5.2 Special hazards arising from the substance or mixture

Special Fire and Explosion Hazards

No special hazards determined.

Hazardous Combustion Products

No combustion products posing significant hazards are expected from this product (an aqueous solution).



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Section 5 Fire Fighting Measures (Continued)

5.3 Advice for fire fighters

Protective Equipment Self-contained breathing apparatus is recommended for firefighters in all

chemical fire situations.

5.4 Additional information No further relevant information available.

Section 6 Accidental Release Measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal Precautions Avoid inhaling, ingesting, and contact with eyes and skin.

Wear protective gloves, protective clothing and eye/face protection.

6.2 Environmental Precautions Contain spill to prevent migration.

Do not allow the undiluted product to enter sewers/surface or ground water.

6.3 Methods and material for containment and cleaning up

Spill and Leak Procedures Absorb spilled material with an appropriate inert, non-flammable absorbent and

dispose according to local regulations.

6.4 Reference to other sections Refer sections 8 and 13.

Section 7 Handling and Storage

7.1 Precautions for safe handling Use good laboratory procedures; avoid eye and skin contact.

7.2 Conditions for safe storage, including any incompatibilities

Store at 20 to 28°C, as directed on the product label.

To maintain product quality, store according to the instructions in the product

labeling.

Store away from strong acids, strong bases, strong oxidizers and incompatible

materials (section 10).

7.3 Specific end uses No further relevant information available.

Section 8 Exposure Controls and Personal Protection

8.1 Control parameters

Exposure Limits

US OSHA

ACGIH

Sodium Hydroxide 2 mg/m3 TWA

CAS # 1310-73-2

Sodium Hydroxide

CAS # 1310-73-2

2 mg/m3 Ceiling

DFG MAKNone established



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Section 8 Exposure Controls and Personal Protection (Continued)

Ireland

Sodium Hydroxide 2 mg/m3 STEL CAS # 1310-73-2

IOELVs None established

NIOSH

9.1

Sodium Hydroxide 10 mg/m3 IDLH CAS # 1310-73-2

Japan None established

8.2 Exposure controls

Engineering ControlsNo special engineering controls are required. Use with good general ventilation.

Eye Protection Safety glasses or chemical goggles should be worn to prevent eye contact.

Refer U.S. OSHA 29 CFR 1910.133, European Standard EN166 or appropriate

government standards.

Skin Protection Impervious gloves, such as Nitrile or equivalent, should be worn to prevent skin

contact.

Refer U.S. OSHA 29 CFR 1910.138, European Standard EN374 or appropriate

government standards.

Respiratory Protection Under normal conditions, the use of this product should not require respiratory

protection. If overexposure should occur and ventilation is not adequate to maintain airborne concentrations at acceptable levels, the use of respiratory

protection should be evaluated by a qualified professional.

Section 9 Physical and Chemical Properties

Physical State Liquid Specific Gravity ≈ 1.01 @20°C (Water=1.0)

Color Pale yellow Solubility

Information on basic physical and chemical properties

Transparency Clear Water Miscible

Odor Bleach odor Organic Not determined

pH >= 12.0 Partition coefficient: Not determined

n-octanol/water

Freezing Point Not determined Auto-ignition Temp. Not applicable

Boiling Point Not determined Decomposition Not determined

Temperature

Flash Point Not applicable Percent Volatiles Not applicable

Evaporation Rate Not determined Vapor Pressure Not determined

Flammability (Solid, Gas) Not applicable Viscosity Not determined

Flammability Limits Not applicable Explosive Properties Not applicable



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Section 9 Physical and Chemical Properties (Continued)

Vapor Density Not determined **Oxidizing Properties** Not applicable

Odor Threshold Not applicable

9.2 Other Information No further relevant information available.

Section 10 Stability and Reactivity

No further relevant information available. 10.1 Reactivity

10.2 Chemical Stability The product is stable in accordance with recommended storage conditions.

10.3 Possibility of hazardous reactions

No further relevant information available.

10.4 Conditions to Avoid To maintain product performance keep away from strong acids, strong bases,

strong oxidizers.

Avoid exposure to heat and direct sunlight.

10.5 Incompatible materials No further relevant information available.

10.6 Hazardous Decomposition Products

No decomposition products posing significant hazards would be expected from

this product (an aqueous solution).

Section 11 Toxicological Information

11.1 Information on toxicological effects

Toxicity Data for Hazardous Ingredients

Sodium Hydroxide Dermal LD50 Rabbit 1350 mg/kg

CAS # 1310-73-2

Sodium Hypochlorite CAS # 7681-52-9

Oral LD50 Rat 8200 mg/kg; Dermal LD50 Rabbit >10000 mg/kg

Primary Routes of Exposure

Eye contact, ingestion, inhalation, and skin contact.

Skin Corrosion/Irritation

Causes severe skin burns.

Serious eye damage/eye

irritation

Causes serious eye damage.

Respiratory/skin sensitization No data available.

No ingredients in this product are listed as carcinogens by ACGIH, IARC, NTP, Carcinogenicity

OSHA or 1272/2008 EC regulation.

No data available. Germ cell mutagenicity Reproductive Toxicity No data available. Specific target organ toxicity - single exposure

No data available.



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Section 11 Toxicological Information (Continued)

Specific target organ toxicity - repeated exposure

No data available.

Aspiration hazard No data available.

Other Information No further relevant information available.

Section 12 Ecological Information

12.1 Ecotoxicity

Fresh Water Species

Sodium Hydroxide 96 h LC50 Oncorhynchus mykiss: 45.4 mg/L [static] CAS # 1310-73-2

Sodium Hypochlorite 96 h LC50 Pimephales promelas: 0.06 - 0.11 mg/L [flow-through]; 96 h LC50 Pimephales promelas: 4.5 - 7.6 mg/L [static]: 96 h LC50 Lepomis

LC50 Pimephales promelas: 4.5 - 7.6 mg/L [static]; 96 h LC50 Lepomis macrochirus: 0.4 - 0.8 mg/L [static]; 96 h LC50 Lepomis macrochirus: 0.28 - 1 mg/L [flow-through]; 96 h LC50 Oncorhynchus mykiss: 0.05 - 0.771 mg/L [flow-through]; 96 h LC50 Oncorhynchus mykiss: 0.03 - <0.19 mg/L [semi-static];

96 h LC50 Oncorhynchus mykiss: 0.18 - 0.22 mg/L [static]

Microtox No information available.

Water Flea

Sodium Hypochlorite 96 h EC50 Daphnia magna: 2.1 mg/L; 48 h EC50 Daphnia magna: 0.033 -

CAS # 7681-52-9 0.044 mg/L [Static]

Fresh Water Algae No information available.

12.2 Persistence and degradability Not determined for the product.

12.3 Bioaccumulation Not determined for the product.12.4 Mobility in soil Not determined for the product.

12.5 Results of PBT and vPvB assessment

Not determined for the product. PBT: Not applicable, vPvB: Not applicable.

12.6 Other Adverse Effects Toxic to aquatic life

This product is classified as environmentally hazardous. Do not allow undiluted product to enter sewer/surface or ground water. Dispose of contents/container to

in accordance with local/national regulations

Section 13 Disposal Considerations

13.1 Waste treatment methods

Product Waste DisposalChemical residues and remains should be routinely handled as special waste. This

must be disposed of in compliance with anti-pollution and other laws of the country concerned. To ensure compliance we recommend that you contact the relevant (local) authorities and/or an approved waste-disposal company for information.

13.2 Additional information Suggested European waste catalogue 18 01 06* - chemicals consisting of or

containing dangerous substances. Dispose in accordance with national, state

and local waste regulations.



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Section 14 Transport Information

Transportation of this product is not regulated under ICAO, IMDG, US DOT, European ADR or Canadian TDG.

Section 15 Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture US Federal and State Regulations

SARA 313 No ingredients listed.

CERCLA RG's, 40 CFR 302.4 Sodium Hydroxide is listed.

Sodium Hypochlorite is listed.

California Proposition 65 No ingredients listed.

Massachusetts MSL Sodium Hydroxide is listed.

Sodium Hypochlorite is listed.

New Jersey Dept. of Health RTK List

Sodium Hydroxide is listed. Sodium Hypochlorite is listed.

Pennsylvania RTK Sodium Hydroxide is listed.

Sodium Hypochlorite is listed.

EU Regulations

This SDS complies with EC Regulations 1907/2006 (REACH) and amendments.

Water Hazard Class (Germany) WGK 1, low water endangering

REACH 1907/2006 EC - Annex XIV - list of substances subject to authorization.

No ingredients listed.

According to EC Directives (1999/45/EC and 67/548 EEC)

Not classified as dangerous per EC Directives (1999/45/EC and 67/548 EEC)

Canada

This product is exempt from WHMIS label and SDS requirements.

PIN Not applicable

Ingredients on Ingredient Disclosure List

Sodium Hydroxide Sodium Hypochlorite

Ingredients with unknown toxicological properties

Product is exempt

15.2 Chemical Safety Assessment A Chemical Safety Assessment has not been carried out.

Some hazardous ingredients listed in Section 15 are below OSHAs and WHMIS' 1.0% w/w (0.1% for carcinogens) or EU's ingredient specific concentrations required for reporting in Section 3.



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Section 16 Other Information

Safety Ratings	Flammability: 0 Health: 3 Reactivity with Water: 0 Contact: 3	Code 0=None 1=Slight 2=Caution 3=Severe
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Revision Changes

Updated to GHS.

Hazard Class, hazard statements and risk phrase description from section 3

C - Corrosive

N - Dangerous for the environment

R 35 Causes severe burns.

R31 Contact with acids liberates toxic gas.

R34 Causes burns.

R50 Very toxic to aquatic organisms.

Aquatic Acute 1 - Aquatic Hazard Acute, Category 1

Eye Dam. 1 - Eye Damage Category 1

Skin Corr. 1A - Skin Corrosion Category 1A

Skin Corr. 1B - Skin Corrosion Category 1B

H314 - Causes severe skin burns and eye damage.

H318 - Causes serious eye damage.

H400 - Very toxic to aquatic life.

Abbreviations and Acronyms

ACGIH - American Conference of Governmental Industrial Hygienists

ADR - European Agreement Concerning The International Carriage Of Dangerous Goods By Road

CERCLA - The Comprehensive Environmental Response, Compensation, and Liability Act

CLP - Classification, Labeling and Packaging

DFGMAK - Republic Germany's maximum exposure limit

GHS - Globally Harmonized System

HCS - Hazard Communication Standard

IARC - International Agency for Research on Cancer

IATA - International Air Transport Association

ICAO - International Civil Aviation Organization

IMDG - International Maritime Dangerous Goods

IOELVs - European Unions' Indicative Occupational Exposure Limit Values

NIOSH - National Institute for Occupational Safety and Health

NTP - National Toxicology Program

OSHA - Occupational Safety and Health Administration

PBT - Persistent bioaccumulative and toxic substances

SARA - Superfund Amendments and Reauthorization Act

TDG - Canadian Transportation Of Dangerous Goods Regulations.

UN GHS - United Nations Globally Harmonized System

US DOT - United States Department of Transportation

WHMIS - Workplace Hazardous Material Information System

vPvB - Very persistent and very bioaccumulative substances



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Section 16 Other Information (Continued)

EC50 - Effective Concentration, 50%

LC50 - Lethal Concentration, 50%

LD50 - Lethal Dose, 50%

For further information, please contact your local Iris Diagnostics representative.

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