Product Stewardship Summary

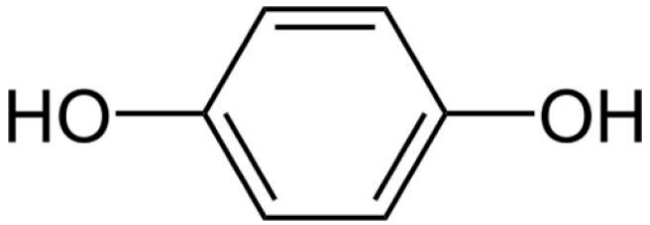
Hydroquinone

General Statement

Hydroquinone is a reducing agent, a major component of photographic developers for film and paper, a polymerization inhibitor, and an antioxidant. Hydroquinone is a low to moderate hazard material and risk of adverse health effects associated with both occupational and consumer use of this chemical is anticipated to be low to moderate.

Chemical Identity

Name: Hydroquinone
Brand Names: HYDROQUINONE TECH GRADE
Chemical name (IUPAC): 1,4-dihydroxybenzene
CAS number(s): 123-31-9
EC number: 204-617-8
Molecular formula: $C_6H_6O_2$
Structure:



Uses and Applications

Hydroquinone is used within industrial settings mainly to stabilize monomers, preventing the polymerization process. It is efficient in the monomer production, storage, and transport. Hydroquinone also is used as skin bleaching product within cosmetic uses.

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Physical/Chemical Properties

Phys/Chem Safety Assessment

Property	Value
Form	Crystalline
Physical state	Solid
Color	Off-white
Odor	Acrylic/pungent
Density	1.1 g/cm^3 @ 20°C
Melting / boiling point	172.3 / 287 °C
Flammability	Not highly flammable
Explosive properties	No data available
Self-ignition temperature	515 °C
Vapor pressure	0.000089 kPa @ 25°C
Mol weight	110.11 g/mol
Water solubility	72 g/L @25°C
Flash point	165°C
Octanol-water partition coefficient (Logk_{ow})	0.59

Exposure, Hazard and Safety Assessment

The following section describes possible exposure scenarios and hazards associated with hydroquinone. The exposure assessment describes both the amount of and the frequency with which a chemical substance reaches a person, a population of people, or the environment. Hazard refers to the inherent properties of a substance that make it capable of causing harm to human health or the environment. The safety assessment reports the possibility of a harmful event arising from exposure to a chemical or physical agent under specific conditions. Just because a substance may possess potentially harmful properties does not mean that it automatically poses a risk. It is not possible to make that determination without understanding the exposure.

Human Health Effects

Human Exposure Assessment

Consumer: Hydroquinone has a number of uses, primarily as a result of its properties as a water-soluble reducing agent. It is used as a reducing agent in most photographic developing solutions. It is also used in the manufacture of rubber antioxidants, other antioxidants, and dyes. Hydroquinone acts as a polymerization inhibitor for some chemicals, such as acrylic acid and methyl methacrylate. It is used as a stabilizer in paints, varnishes, motor fuels, and oils. Hydroquinone is used in medicine and in cosmetics as a depigmenting agent in a number of topical skin creams. Consumer exposure to hydroquinone is most likely limited to dermal contact during use of products that contain low levels within the product formulation.

Worker: In industrial settings, hydroquinone is manufactured and handled in closed processes as much as possible, which ensures that worker exposure to hydroquinone is minimized. When there is potential for exposure during loading, unloading, sampling or during maintenance operations, exposure to hydroquinone can be further minimized by the proper use of personal protective equipment.

Human Hazard Assessment

Hydroquinone has high acute oral toxicity and low acute dermal toxicity; it is not associated with significant toxicity to internal organs after repeated oral or dermal exposures. Contact with the eyes can cause serious eye damage and skin contact may result in skin sensitization. Hydroquinone is suspected of causing genotoxicity/mutagenicity and some evidence from animal studies indicates oral and dermal exposures result in an increased incidence of cancer.

Effect Assessment	Result
Acute Toxicity Oral / inhalation / dermal	High toxicity through oral exposures; low toxicity through dermal exposures.
Irritation / corrosion Skin / eye / respiratory test	Not irritating to the skin. May cause an allergic skin reaction. Causes serious eye damage.
Toxicity after repeated exposure Oral / inhalation / dermal	Does not cause significant toxicity to internal organs after repeated oral or dermal exposures in animal studies.
Genotoxicity / Mutagenicity	Suspected of causing genotoxicity/mutagenicity, based on *in vitro* and *in vivo* studies results.
Carcinogenicity	Suspected of causing cancer, based on several oral exposure studies in experimental animals.
Reproductive/Developmental Toxicity	No effect on fertility and no developmental toxicity, based on oral exposure studies in experimental animals.

Human Health Safety Assessment

Consumer: Hydroquinone is used in numerous consumer product formulations. Exposure to hydroquinone as a pure substance may result in significant human health risks. However, frequent and direct contact with the pure substance is unlikely. Hydroquinone in consumer product formulations will be present at safe levels when appropriate protective measures are observed, in line with the conditions of use written on the product packaging. Therefore, due to the extremely low levels of residual monomer present in consumer products, exposure and subsequent risk are unlikely.

Worker: In industrial settings, hydroquinone is manufactured and handled primarily in closed processes, which limit exposure. Based on good manufacturing processes and industrial hygiene the occupational health risk associated with hydroquinone is low.

Environmental Effects

Environmental Exposures

Hydroquinone is readily biodegradable and has low potential for bioaccumulation. Based on its physical and chemical properties, hydroquinone is expected to have moderate mobility in soil and to adsorb to suspended solids and sediment in the aquatic environment. Volatilization from water surfaces is not expected.

Environmental Hazard Assessment

Effect Assessment	Result
Aquatic Toxicity	Very toxic to fish, invertebrates, and algae.

Fate and behavior	Result
Biodegradation	Readily biodegradable.
Bioaccumulation potential	Not potentially bioaccumulative (log K_{ow} = 0.59).
PBT / vPvB conclusion	Not considered to be either PBT or vPvB.

Environmental Safety Assessment

Based on the available data, hydroquinone is considered highly toxic to fish, aquatic invertebrates, and algae. If released into the aquatic environment, it will not bioaccumulate in aquatic organisms and be removed from the system rapidly through biodegradation.

Risk Management Recommendations

Exposure to hydroquinone in the workplace can be controlled by sufficient ventilation, proper handling and storage techniques, and the use of appropriate personal protective equipment as recommended in the SDS. Consumer products that contain significant levels of hydroquinone should include necessary safety labeling and provide appropriate handling and disposal methods.

A selection of occupational exposure limits are presented, below:

- USA. ACGIH Threshold Limit Values (TLV; 8-hr TWA) 1mg/m^3
- USA. Occupational Exposure Limits (OSHA) -Table Z-1 Limits for Air Contaminants (8-hr TWA) 2 mg/m^3
- USA. NIOSH Recommended Exposure Limits (Ceiling Limit) 2mg/m^3
- California permissible exposure limits for chemical contaminants (Title 8, Article 107) (PEL) 2 mg/m^3
- ACGIH -Biological Exposure Indices (BEI) (In Blood) 1.5%

Regulatory Agency Review

Hydroquinone is on the following lists:

ACGIH - Threshold Limit Values (TLVs)
Alberta - Occupational Exposure Limits (OELs)
Argentina - Occupational Exposure Limits (OELs)
Arizona DOSH - Exposure Limits for Air Contaminants - Table Z-1
Australia - Workplace Exposure Standards
Australian Inventory of Chemical Substances (AICS)
Austria - Occupational Exposure Limits (OELs)
Belgium - Occupational Exposure Limits (OELs)
British Columbia - Occupational Exposure Limits (OELs)
Bulgaria - Occupational Exposure Limits (OELs)
Cal/OSHA - Permissible Exposure Limits for Chemical Contaminants
Cal/OSHA - The Hazardous Substances List
Carcinogenic Potency Database (CPDB) - Summary of Carcinogenicity Results - Rats and Mice
China - Chemical Inventory of Existing Chemical Substances (IECSC) - CAS Numbers
Colombia - Occupational Exposure Limits (OELs)
Connecticut OSHA - Exposure Limits for Air Contaminants - Table Z-1
Denmark - Occupational Exposure Limits (OELs)
DOE Protective Action Criteria (PAC)
ECHA - Draft Community Rolling Action Plan (CoRAP) (2012-2014)
ECHA - List of Pre-registered Substances
Environment Canada - Challenge Program Substances
Environment Canada - Chemical Management Plan - Status of Prioritized Substances
Environment Canada - Domestic Substances List (DSL)
Environment Canada - Domestic Substances List (DSL) - Human Health Categorization
Environment Canada - Domestic Substances List (DSL) - Inherently Toxic in the Environment Categorization
Environment Canada - Domestic Substances List (DSL) Categorization of Existing Substances
Environment Canada - Hazardous Products Act (HPA) - Ingredient Disclosure List (IDL)
Environment Canada - National Pollutant Release Inventory (NPRI) - 2001
Environment Canada - National Pollutant Release Inventory (NPRI) - 2002
Environment Canada - National Pollutant Release Inventory (NPRI) - 2003
Environment Canada - National Pollutant Release Inventory (NPRI) - 2004
Environment Canada - National Pollutant Release Inventory (NPRI) - 2005

Environment Canada - National Pollutant Release Inventory (NPRI) - 2006
Environment Canada - National Pollutant Release Inventory (NPRI) - 2007
Environment Canada - National Pollutant Release Inventory (NPRI) - 2008
Environment Canada - National Pollutant Release Inventory (NPRI) - 2009
Environment Canada - National Pollutant Release Inventory (NPRI) - 2010
Environment Canada - National Pollutant Release Inventory (NPRI) - 2011
Environment Canada - National Pollutant Release Inventory (NPRI) - 2012/2013
Environment Canada - National Pollutant Release Inventory (NPRI) – 2014-2015
EPA - 40CFR - Table 1 to Subpart F of Part 63—Synthetic Organic Chemical Manufacturing Industry Chemicals
EPA - 40CFR - Table 2 to Subpart F of Part 63 — Organic Hazardous Air Pollutants
EPA - Acute Exposure Guideline Leves (AEGLs) - Priority List 2
EPA - CERCLA - Hazardous Substances and their Reportable Quantities (RQs)
EPA - Chemical Update System (CUS) - 2002
EPA - Clean Air Act - Section 111 - Standards of Performance for New Stationary Sources of Air Pollutants
EPA - Clean Air Act - Section 112B - Hazardous Air Pollutants
EPA - EPCRA - Section 302 - Extremely Hazardous Substance (EHS) List
EPA - EPCRA - Section 304 - Extremely Hazardous Substance (EHS) Reportable Quantities (RQs)
EPA - EPCRA - Section 313 - Toxic Chemicals
EPA - Freshwater Screening Benchmarks
EPA - Inert Ingredients in Pesticide Products
EPA - Inert Ingredients Permitted for Use In Nonfood Pesticide Products
EPA - IRIS - Inhalation Reference Concentrations (RfCs)
EPA - IRIS - Inhalation Unit Risks
EPA - IRIS - Oral Reference Doses (RfDs)
EPA - IRIS - Oral Slope Factors
EPA - IRIS - Substance List
EPA - IRIS - Weight of Evidence (WOE) Characterizations
EPA - Marine Screening Benchmarks
EPA - Master Testing List
EPA - Master Testing List (1996)
EPA - Office of Pollution Prevention and Toxics (OPPT) High Production Volume (HPV) Program - 1990
EPA - Regional Removal Management Levels (RML) - Chemical-specific Parameters Supporting - Density
EPA - Regional Removal Management Levels (RML) - Chemical‑specific Parameters Supporting - Diffusivity
EPA - Regional Removal Management Levels (RML) - Chemical‑specific Parameters Supporting - Henry's Law Constants
EPA - Regional Removal Management Levels (RML) - Chemical‑specific Parameters Supporting - Molecular Weight
EPA - Regional Removal Management Levels (RML) - Chemical‑specific Parameters Supporting - Organic Carbon Partition Coefficient
EPA - Regional Removal Management Levels (RML) - Chemical‑specific Parameters Supporting - Permeability Coefficient
EPA - Regional Removal Management Levels (RML) - Chemical‑specific Parameters Supporting - Water Solubility
EPA - Regional Removal Management Levels (RML) - Industrial Soil Supporting (TR=1E-4, HQ=1) - Carcinogenic and Noncarcinogenic SLs
EPA - Regional Removal Management Levels (RML) - Industrial Soil Supporting (TR=1E-4, HQ=3) - Carcinogenic and Noncarcinogenic SLs
EPA - Regional Removal Management Levels (RML) - Residential Soil Supporting - Toxicity and Chemical-specific Information
EPA - Regional Removal Management Levels (RML) - Residential Soil Supporting (TR=1E-4, HQ=1) - Carcinogenic and Noncarcinogenic SLs
EPA - Regional Removal Management Levels (RML) - Residential Soil Supporting (TR=1E-4, HQ=3) - Carcinogenic and Noncarcinogenic SLs
EPA - Regional Removal Management Levels (RML) - Residential Tapwater Supporting - Toxicity and Chemical-specific Information
EPA - Regional Removal Management Levels (RML) - Residential Tapwater Supporting (TR=1E-4, HQ=1) - Carcinogenic and Noncarcinogenic SLs
EPA - Regional Removal Management Levels (RML) - Residential Tapwater Supporting (TR=1E-4, HQ=3) - Carcinogenic and Noncarcinogenic SLs
EPA - Regional Removal Management Levels (RML) - Summary Table - Toxicity and Chemical-specific Information
EPA - Regional Removal Management Levels (RML) - Summary Table (TR=1E-4, HQ=1) - Screening Levels
EPA - Regional Removal Management Levels (RML) - Summary Table (TR=1E-4, HQ=3) - Screening Levels

EPA - Regional Screening Level (RSL) Chemical-specific Parameters Supporting - Henry's Law Constants
EPA - Regional Screening Levels (RSL) - Chemical-specific Parameters Supporting - Density
EPA - Regional Screening Levels (RSL) - Chemical-specific Parameters Supporting - Diffusivity in Air and Water
EPA - Regional Screening Levels (RSL) - Chemical-specific Parameters Supporting - Molecular Weight
EPA - Regional Screening Levels (RSL) - Chemical-specific Parameters Supporting - Soil and Water Partition Coefficients
EPA - Regional Screening Levels (RSL) - Chemical-specific Parameters Supporting - Tapwater Dermal Parameters
EPA - Regional Screening Levels (RSL) - Chemical-specific Parameters Supporting - Water Solubility
EPA - Regional Screening Levels (RSL) - Composite Worker Ambient Air - Toxicity and Chemical-specific Information
EPA - Regional Screening Levels (RSL) - Composite Worker Ambient Air (TR=1E-6, HQ=0.1) - Carcinogenic and Noncarcinogenic SLs
EPA - Regional Screening Levels (RSL) - Composite Worker Ambient Air (TR=1E-6, HQ=1) - Carcinogenic and Noncarcinogenic SLs
EPA - Regional Screening Levels (RSL) - Composite Worker Soil - Toxicity and Chemical-specific Information
EPA - Regional Screening Levels (RSL) - Composite Worker Soil (TR=1E-6, HQ=0.1) - Carcinogenic and Noncarcinogenic SLs
EPA - Regional Screening Levels (RSL) - Composite Worker Soil (TR=1E-6, HQ=1) - Carcinogenic and Noncarcinogenic SLs
EPA - Regional Screening Levels (RSL) - Resident Ambient Air - Toxicity and Chemical-specific Information
EPA - Regional Screening Levels (RSL) - Resident Ambient Air (TR=1E-6, HQ=0.1) - Carcinogenic and Noncarcinogenic SLs
EPA - Regional Screening Levels (RSL) - Resident Ambient Air (TR=1E-6, HQ=1) - Carcinogenic and Noncarcinogenic SLs
EPA - Regional Screening Levels (RSL) - Resident Fish Table (TR=1E-6, HQ=0.1) - Carcinogenic and Noncarcingenic SLs
EPA - Regional Screening Levels (RSL) - Resident Fish Table (TR=1E-6, HQ=1) - Carcinogenic and Noncarcingenic SLs
EPA - Regional Screening Levels (RSL) - Resident Fish Table -Toxicity and Chemical-specific Information
EPA - Regional Screening Levels (RSL) - Resident Soil - Toxicity and Chemical-specific Information
EPA - Regional Screening Levels (RSL) - Resident Soil (TR=1E-6, HQ=0.1) - Carcinogenic and Noncarcinogenic SLs
EPA - Regional Screening Levels (RSL) - Resident Soil (TR=1E-6, HQ=1) - Carcinogenic and Noncarcinogenic SLs
EPA - Regional Screening Levels (RSL) - Resident Soil to Groundwater - Toxicity and Chemical-specific Information
EPA - Regional Screening Levels (RSL) - Resident Soil to Groundwater (TR=1E-6, HQ=0.1) - Protection of Groundwater SSLs
EPA - Regional Screening Levels (RSL) - Resident Soil to Groundwater (TR=1E-6, HQ=1) - Protection of Groundwater SSLs
EPA - Regional Screening Levels (RSL) - Resident Tapwater - Toxicity and Chemical-specific Information
EPA - Regional Screening Levels (RSL) - Resident Tapwater (TR=1E-6, HQ=0.1) - Carcinogenic and Noncarcinogenic SLs
EPA - Regional Screening Levels (RSL) - Resident Tapwater (TR=1E-6, HQ=1) - Carcinogenic and Noncarcinogenic SLs
EPA - Regional Screening Levels (RSL) - Summary Table - Toxicity and Chemical-specific Information
EPA - Regional Screening Levels (RSL) - Summary Table (TR=1E-6, HQ=0.1) - Protection of Groundwater SSLs
EPA - Regional Screening Levels (RSL) - Summary Table (TR=1E-6, HQ=0.1) - Screening Levels
EPA - Regional Screening Levels (RSL) - Summary Table (TR=1E-6, HQ=1) - Protection of Groundwater SSLs
EPA - Regional Screening Levels (RSL) - Summary Table (TR=1E-6, HQ=1) - Screening Levels
EPA - SARA - Section 302A - Extremely Hazardous Substance (EHS) List
EPA - SARA - Section 302A - Extremely Hazardous Substance (EHS) List
EPA - Toxics Release Inventory (TRI) Chemicals
EPA - TSCA - 12(b) - Export Notification
EPA - TSCA - 4 - Termination of Testing
EPA - TSCA - 8(a) - Preliminary Assessment Information Rules (PAIR)
EPA - TSCA - 8D Health and Safety Data Rule (HSDR) (a) - Specific Chemicals
EPA - TSCA - Chemical Hazard Information Profiles (CHIPS)
EPA - TSCA - Inventory
EPA - TSCA - Test Submissions - Mega
EPA - TSCA - Test Submissions - Section 4
EPA - TSCA 4 Tests - Testing of Existing Chemicals
EPA - TSCA Section 4 Testing Results
ETUC - Priority List for REACH Authorisation
EU - Cosmetic Directive - Annex II
EU - Cosmetic Directive - Annex III
EU - Cosmetic Ingredients and Fragrance Inventory
EU - European Inventory of Existing Commercial Substances (EINECS)
EU - Table 3.1 of Annex VI to the CLP Regulation
EU - Table 3.2 of Annex VI to the CLP Regulation

FDA - Cumulative Estimated Daily Intake/Acceptable Daily Intake Table
FDA - Inventory of Effective Food Contact Substance (FCS) Notifications
FDA - List of Indirect Additives
Finland - Occupational Exposure Limits (OELs)
France - Occupational Exposure Limits (OELs)
Grandjean and Landrigan Neurotoxicants
Hawaii - Department of Labor and Industrial Relations - Air Contaminants - Permissible Exposure Limits
Hawaii - State Department of Health - Reportable Quantities
Health Canada - Cosmetic Ingredient Hotlist - Restricted Ingredients
IARC- Group 3
Iceland - Occupational Exposure Limits (OELs)
Illinois - List of Toxic Air Contaminants
Indiana OSHA - Exposure Limits for Air Contaminants - Table Z-1
Iowa OSHA - Exposure Limits for Air Contaminants - Table Z-1
Japan - Occupational Exposure Limits (OELs)
Jordan - Occupational Exposure Limits (OELs)
Korea - Occupational Exposure Limits (OELs)
Maryland OSH - Exposure Limits for Air Contaminants - Table Z-1
Massachusetts Department of Public Health - Massachusetts Substance List (MSL)
Massachusetts Toxics Use Reduction Act (TURA)
Mexico - National Inventory of Chemical Substances
Mexico - Occupational Exposure Limits (OELs)
Michigan - Exposure Limits for Air Contaminants - Table G-1-A
Mine Safety and Health Administration (MSHA) - Permissible Exposure Limits (PELs)
Minnesota - Department of Labor and Industry - Air Contaminants - Permissible Exposure Limits
Minnesota - List of Hazardous Substances
National Cancer Institute - SMILES Notations
Nevada OSHA - Exposure Limits for Air Contaminants - Table Z-1
New Jersey - Right to Know List
New Mexico OHSB - Exposure Limits for Air Contaminants - Table Z-1
New Zealand - Inventory of Chemicals (NZIoC)
New Zealand - Workplace Exposure Standards
NFPA - Hazard Ratings
NIOSH - Immediately Dangerous to Life or Health (IDLH) Concentration Values
NIOSH - Pocket Guide - Chemicals Listed
NIOSH - Recommendations for Chemical Protective Clothing
NIOSH - Recommended Exposure Limits (RELs)
NOAA Screening Quick Reference Tables - Organic in Water and Soil
NOAA Screening Quick Reference Tables - Organics - Sediment
NTP - Nominations to the Testing Program - 2009 (Fall)
OECD - High Production Volume (HPV) Chemicals - 2004
OECD - High Production Volume (HPV) Chemicals - 2007
Ontario - Current Occupational Exposure Limits (OELs)
OSHA - 29 CFR 1910.1000 - Table Z-1
OSHA - 29 CFR 1910.1000 - Table Z-1 - Annotated
OSHA - Permissible Exposure Limits (PELs) - Construction
OSHA - Permissible Exposure Limits (PELs) - Federal Contractors
OSHA - Permissible Exposure Limits (PELs) – Shipyards
Pennsylvania - Hazardous Substance List
Peru - Occupational Exposure Limits (OELs)
Philippine Inventory of Chemicals and Chemical Substances (PICCS)
Poland - Occupational Exposure Limits (OELs)
Puerto Rico OSHA - Exposure Limits for Air Contaminants - Table Z-1
Regional Screening Level (RSL) Composite Worker Ambient Air (TR=1E-6, HQ=1) - Toxicity and Chemical-specific Information
Rhode Island - Hazardous Substance List
Russia - Occupational Exposure Limits (OELs)
Singapore - Occupational Exposure Limits (OELs)
South Carolina OSH - Exposure Limits for Air Contaminants - Table Z-1
Sweden - Occupational Exposure Limits (OELs)

Switzerland - Occupational Exposure Limits (OELs)
TEDX List of Potential Endocrine Disruptors
Tennessee OSHA - Exposure Limits for Air Contaminants - Table Z-1
The Netherlands - Occupational Exposure Limits (OELs)
The Philippines - Occupational Exposure Limits (OELs)
Turkey - Occupational Exposure Limits (OELs)
United Kingdom - Occupational Exposure Limits (OELs)
United Kingdom - Workplace Exposure Limits (WELs) - 2011
Utah OSH - Exposure Limits for Air Contaminants - Table Z-1
Vermont - Department of Labor - Air Contaminants - Permissible Exposure Limits
Vietnam - Occupational Exposure Limits (OELs)
Virgin Islands DOSH - Exposure Limits for Air Contaminants - Table Z-1
Virginia OSH - Exposure Limits for Air Contaminants - Table Z-1
Washington State - Permissible Exposure Limits (PELs) for Airborne Contaminants
Wyoming OSHA - Exposure Limits for Air Contaminants - Table Z-1

Regulatory Information / Classification and Labeling

Under the Globally Harmonized System for classification and labeling (GHS), substances are classified according to their physical, health, and environmental hazards. The hazards are communicated via specific labels and the (Extended) SDS. GHS attempts to standardize hazard communication so that the intended audience (workers, consumers, transport workers, and emergency responders) can better understand the hazards of the chemicals in use.

GHS Classification:

Eye Irritation, Category 1
Skin Sensitization, Category 1
Acute toxicity, Category 4
Mutagenicity, Category 2
Carcinogenicity, Category 2
Acute Aquatic Toxicity, Category 1

Hazard Statements:

H302: Harmful if swallowed
H317: May cause allergic skin reaction
H318: Causes serious eye damage
H341: Suspected of causing genetic defects
H351: Suspected of causing cancer
H400: Very toxic to aquatic life

Signal Word: Danger

Precautionary Statements:

P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P261: Avoid breathing dust/fumes/gas/mist/vapors/spray.
P264: Wash skin thoroughly after handling.
P272: Contaminated work clothing must not be allowed out of the workplace.
P280: Wear eye protection/ face protection/protective gloves.
P301: IF SWALLOWED: Call a POISON CENTER or doctor/ physician if you feel unwell. Rinse mouth.
P302: IF ON SKIN: Wash with plenty of soap and water.
P305: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.
P307: IF exposed or concerned: Get medical advice/ attention.
P333: If skin irritation or rash occurs: Get medical advice/ attention.
P362: Take off contaminated clothing and wash before reuse.

P501: Dispose of contents/ container to an approved waste disposal plant

Hazard Pictograms:

Conclusion

Hydroquinone is a useful chemical primarily as a result of its properties as a water-soluble reducing agent. Consumer exposure to hydroquinone is most likely limited to dermal contact during use of products that contain low levels within the product formulation. When handled responsibly, the potential for human health risks can be minimized, allowing consumers and workers to use materials containing hydroquinone safely.

Contact Information with Company

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Additional Information

For more information on GHS, visit http://www.osha.gov/dsg/hazcom/ghsguideoct05.pdf or http://live.unece.org/trans/danger/publi/ghs/ghs_welcome_e.html.
Ashland product stewardship summaries are located at http://www.ashland.com/sustainability/product/product-stewardship

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