



KEYSTONE

SAFETY DATA SHEET

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HMIS RATINGS: HEALTH: 2 FIRE: 1 REACTIVITY: 0 PERSONAL PROTECTION: F

SECTION 1: PRODUCT IDENTIFICATION

Product I.D.: 30161250
Product Name: KEYACID GOLDEN BROWN POWDER
Product Description: Powdered Acid Brown Dye Compound
Chemical Family: Contains multiple dye families
Effective Date: April 3, 2009

SECTION 2: HAZARD IDENTIFICATION AND EMERGENCY OVERVIEW

Emergency Overview:

Unprotected contact may cause moderate eye irritation, mild skin and respiratory irritation.

Eye Contact:

Depending on duration and individual sensitivity, unprotected contact may cause moderate eye irritation, pain, redness, stinging sensation, swelling, watering, inflammation, itching, burning feeling and other effects. Heavy or prolonged contact may cause eye injury. Heated processing of liquids that creates mists or vapors may intensify effects. Follow all supervisor and Personal Protection instructions in Section 8 of this SDS.

Skin Contact:

Depending on degree of unprotected contact with product and individual sensitivity, may cause mild irritation to skin, redness, rash, itching, and other effects. Constant/repeated long-term contact with some powdered products may cause abrasion of skin or increase other effects. Some liquid components may be absorbed through unprotected skin causing or adding to effects.

Inhalation:

Depending on duration of unprotected inhalation of product, vapors, mists, aerosols or dusts may cause mild irritation of the nose, throat, lungs and mucous membranes. Effects may include shortness of breath, sneezing, cough, runny nose, nausea, headache or other effects. Prolonged or heavy exposure, or heating of liquid material may increase severity of symptoms.

Ingestion:

Depending on amount swallowed, product can cause mild irritation of mouth, throat, esophagus, stomach, and gastrointestinal tract. Effects may include upset stomach, abdominal discomfort, nausea, vomiting, gastrointestinal disturbances, dizziness, diarrhea, or other effects. Aspiration into lungs during vomiting is an emergency and may cause lung injury and life-threatening conditions.

Medical Conditions Aggravated by Exposure:

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Improper protection allowing contact with vapors, mists, aerosols, liquids, splashes or dusts of product by inhalation, eye contact, or skin contact may aggravate pre-existing conditions or diseases of the respiratory system, skin, or eyes. Individuals with above-noted conditions or known or suspected chemical sensitivities or allergies should avoid working with chemicals.

Skin Sensitization:

Not known to cause skin sensitization. With careful handling and when good chemical hygiene procedures are followed, harmful effects are not expected. As a precaution against unforeseen or unexpected sensitivity or possible allergic reactions, follow ALL Personal Protection instructions in Section 8 of this SDS.

Respiratory Sensitization:

Not known to cause respiratory sensitization. With careful handling and good chemical hygiene procedures being followed, no harmful effects are expected. As a precaution against unforeseen or unexpected sensitivity or possible allergic reactions, follow ALL Personal Protection instructions in Section 8 of this SDS. All PPE must be cleaned and maintained after each shift. All exposures should be avoided. Individuals known to be, or suspected to be sensitive to chemical exposure should not work with chemicals.

Special Warnings:

None for this material

Unusual Health Hazards:

None for this material

Supplemental Hazard Information:

No additional information is currently available

Notes to Physician:

Treat Symptomatically based on Section 2 Hazard Warnings and Section 3 ingredients unless indicated otherwise

Cancer Information:

*** Not known to contain carcinogens ***

SECTION 3: OSHA HAZARDOUS INGREDIENTS

Component	CAS Number	Wt %	OSHA - PEL	ACGIH - TLV	Recommended PEL
Confidential Red dye	Undisclosed	1 - 10%	15mg/m3 TWA Total dust 5mg/m3 Respirable	10mg/m3 TWA Total dust 3mg/m3 Respirable	Lowest possible exposure or zero with best PPE.
Sodium monochloride (Color standardizer)	7647-14-5	10 - 20%	Not established	Not established	Lowest possible exposure or zero with best PPE.
Confidential Black dye	Undisclosed	1 - 10%	15mg/m3 TWA Total dust 5mg/m3 Respirable	10mg/m3 TWA Total dust 3mg/m3 Respirable	Not applicable
Disodium sulfate	7757-82-6	.1 - 1%	15 mg/m3 TWA Total dust 5 mg/m3 Respirable	10 mg/m3 TWA Total dust 3 mg/m3 Respirable	Not applicable
Sodium xylene sulfonate	1300-72-7	1 - 10%	Not established	10mg/m3 TWA Total dust 3mg/m3 Respirable	Lowest possible exposure or zero with best PPE.

Important Notice:

Unprotected contact with ingredients listed in Section 3 may be hazardous based on OSHA 29 CFR 1910.1200 & related appendices. Components not listed are trade secrets, non-hazardous, or not reportable. This SDS is not intended to offer full disclosure, but all component information is available to medical or emergency personnel. All hazards are based on contact exposure. Effects may be unpredictable and may vary from person to person due to individual reactions. Reducing or eliminating contact can reduce or eliminate risk. Use protective equipment and clothing in Section 8 to minimize or eliminate contact. Users are responsible for hazard determination and communication. Unless indicated otherwise, non-carcinogenic components are indicated within a 1-10% range, and investigated or potential carcinogens within a 0.1-1% range. HMIS ratings are based on data interpretation, and vary from company to company. They are intended only for quick, general identification of the degree of potential hazards. Hazards range from 0 (Minimal) up to 4 (Severe). Consult the National Paint & Coatings Association HMIS Manual for detailed information on ratings. To handle material safely, consider all information in this SDS.

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SECTION 4: FIRST AID INSTRUCTIONS

Eye Contact:

Immediately rinse with flowing water for at least 15 minutes while holding eyelids open. Get immediate medical attention, as a precaution.

Skin Contact:

Immediately remove contaminated clothing. Wash affected area with soap and rinse with plenty of water. Get medical attention, as a precaution.

Inhalation:

Immediately move person to fresh air. If breathing is difficult give oxygen, call 911, calm the individual. If not breathing, call 911, give artificial respiration (CPR) until medical help arrives. Have this Safety Data Sheet available.

Ingestion:

Do not induce vomiting unless directed to do so by a doctor or by other emergency medical personnel. Forced vomiting of certain chemicals may cause aspiration and lung damage. Have this Safety Data Sheet available.

SECTION 5: FIRE FIGHTING INSTRUCTIONS

Auto-ignition Temperature:

Not applicable

LEL:

Not applicable

UEL:

Not applicable

Unusual hazards:

None expected

Other Hazards:

None known

Types of Extinguishers:

CO2, dry chemical, foam, water fog or spray depending on type of fire

Fire Fighting Directions:

Wear self-contained breathing equipment and fire-proof clothing. Use water spray to cool fire exposed containers if they cannot be safely moved.

SECTION 6: ACCIDENTAL SPILL OR RELEASE INSTRUCTIONS

Special Precautions:

None known. Follow general precautions shown below.

Reporting:

Check the applicable RQs in Section 15

Static Discharges:

IMPORTANT - GUARD AGAINST FIRE AND EXPLOSION: Take precautionary measures against static discharges when cleaning up leaks or spills of powders, combustibles, or flammable liquids. Containers should be properly grounded with metal straps, cables or other appropriate means to relieve static electricity build-up or generation. **IMPORTANT:** When using, mixing, filling, or otherwise dispensing any types of solvents, do not allow buildup of flammable or combustible vapors or vapor-air mixtures in confined spaces, storage tanks, or any other areas or enclosures. Totes, drums and all other containers should be completely sealed when not in use. Vapors can travel a distance to ignition sources and cause fire or explosion. Take every precaution and monitor all safety factors and systems, including maintaining more-than-adequate air-exchange ventilation.

Environmental Protection:

Immediately dike liquid spills with inert absorbent material (sand, "Oil Dry" or other commercially available spill absorbent) to contain and soak up liquid. Prevent material from entering floor drains, sewers, or any bodies of water. For powder spills, use sweeping compound, sawdust, or other appropriate material to contain dust. If possible, recover any uncontaminated materials to re-use.

Protective equipment and clothing:

Wear all proper personal protective equipment and clothing to care for spill situation. See section 8 of this Safety Data Sheet.

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After containing liquid spill by diking and soaking up with inert absorbent material, place in labeled container to be sealed for proper and regulated disposal. Only the slightest residue should remain. Try to save uncontaminated material for reuse whenever possible. For powders, use sweeping compound to minimize dust and pick up as much product as possible. Do not allow liquids to seep into drains, sewers, lakes, rivers, etc. Check Sections 1 and 2 for dye description or type. Solvent dye residue may be cleaned by scrubbing with detergent, depending on type. Do not add water to water-soluble dyes. Dye is concentrated. This will increase amount of color to remove. All cleaning or scrubbing liquids used should be absorbed and placed in labeled containers for correct disposal. Absorbent material containing solvents may release combustible or flammable vapors and should be handled accordingly, properly labeled and disposed. Check Sections 2, 5, 13 & 15 for applicable instructions and regulations.

SECTION 7: HANDLING AND STORAGE**Warnings and Precautions:**

No special precautions anticipated. Wear all PPE in section 8 as a precaution, and avoid physical contact with material.

Personal Protection:

Wear ALL proper personal protective equipment as outlined in section 8 of this SDS.

Handling, Storage & Temperature Conditions:

Keep containers tightly sealed in cool & dry area, out of direct sunlight. IMPORTANT: FOR PRODUCTS LISTING FLAMMABLE/COMBUSTIBLE SOLVENTS or LOW FLASH POINTS - GUARD AGAINST FIRE AND EXPLOSION: Store away from fire hazards and ignition sources, high heat, open flames, welding, hot plates, steam pipes, radiators, etc. Maintain good ventilation. Guard against static discharges. Ground all containers before mixing or filling. Use non-sparking tools to open, close or otherwise work with containers. Limit indoor storage to approved areas with automatic sprinklers. Vapors expected to be released when material is heated during process operations.

STATIC CHARGES: Take precautionary measures against static discharges when mixing, cleaning, filling or otherwise dispensing combustible or flammable liquids. Containers should be properly grounded with metal straps, cables or other appropriate means to relieve static electricity build-up or generation.

VAPORS: IMPORTANT: DO NOT ALLOW buildup of flammable or combustible vapors or vapor-air mixtures in confined spaces, storage tanks, or any other areas or enclosures. Totes, drums and all other containers should be completely sealed when not in use. Vapors can travel a distance to ignition sources and cause fire or explosion. Take every precaution and monitor all safety factors and systems, including maintaining more-than-adequate air-exchange ventilation.

POWDERS: General precautions: Although unlikely in most instances, GUARD AGAINST DUST EXPLOSION HAZARD. Eliminate or keep dust to a minimum. Under the right conditions, high dust concentrations of certain particle sizes mixed with air in a critical ratio in the presence of an ignition source can theoretically cause a dust explosion. Be sure to PROPERLY ground containers when filling, mixing or otherwise dispensing powders. KEEP WORK AREA CLEAN AND DUST-FREE. Follow all Section 8 recommendations for Exposure Controls and Personal Protection.

WATER-BASED PRODUCTS: DO NOT ALLOW TO FREEZE.

SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION**Note: Selecting protective equipment & clothing:**

When choosing personal protective equipment and clothing, consider each worker's environment, all chemicals being handled, temperature, ventilation, and all other conditions. Determination of the level of protection needed for the eyes, skin and respiratory system under working conditions is the responsibility of the product end-user or shift supervisor. SDS Sections 2, 3, 8 and 11 should be consulted.

Eye protection:

As a precaution, wear indirectly vented, splash-proof chemical safety goggles. When handling liquids, wear splash-proof goggles under a clear face-shield. Face shield is not to be used without these goggles. The type or extent of protection needed should be determined by the product end-user or shift supervisor.

Skin Protection:

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Always wear impervious, chemical-resistant synthetic or rubber gloves. Check with manufacturer for best glove for the material being handled. Wear good quality long sleeved work shirt, coveralls, and a rubber or plastic apron. Wash hands after handling and before eating, drinking or using restroom. Shower after each shift. Clean contaminated but reusable protective equipment and clothing before reusing and wearing again. Discard contaminated disposable gloves and clothing. The type or extent of protection needed should be determined by the product end-user or shift supervisor.

Respiratory Protection:

Depending on type of material handled and processing conditions, the appropriate NIOSH approved air-purifying organic vapor/mist respirator or dust respirator (with proper pre-filters if required) should be worn as a precaution when any inhalation contact with product is possible. A properly selected, disposable NIOSH approved air-purifying mask may be acceptable (Check with the mask manufacturer). After each shift or when equipment becomes contaminated, clean the respirator and replace filters in compliance with 29 CFR 1910.134. Discard disposables as often as required. The type or extent of protection needed should be determined by the product end-user, shift supervisor or other appropriate on-site manager.

Eye Washes and Other Protection:

Eye wash stations and drench showers should be located within 100 feet or 10-second walk of the work area per ANSI standard Z358.1-1990.

Ventilation:

Local exhaust or other appropriate ventilation should be used to maintain exposure limits below specified amounts recommended by OSHA, NIOSH, or ACGIH and to draw spray, aerosol, vapors, or dusts away from workers and prevent routine inhalation. At least 10 air changes per hour are recommended for good room ventilation. **IMPORTANT - GUARD AGAINST FIRE AND EXPLOSION:** When using, mixing, filling, or otherwise dispensing any types of solvents, do not allow buildup of flammable or combustible vapors or vapor-air mixtures in confined spaces, storage tanks, or any other areas or enclosures. Totes, drums and all other containers should be completely sealed when not in use. Vapors can travel a distance to ignition sources and cause fire or explosion. Take every precaution and monitor all safety factors and systems, including maintaining more-than-adequate air-exchange ventilation.

Airborne Exposure Limits:

Not referenced in literature

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Flash Point:	Not applicable
Decomposition Temperature::	Not established
pH:	Not established
% Water Content:	0
% Total Solids / Non-Volatiles:	100
% Total VOC:	0.00
% Other Components:	Undisclosed
Appearance:	Brownish powder
Odor:	Slight or none
Freezing/Melting Point:	Not established
Lbs. per gallon:	Not established
Specific Gravity:	Not established
Vapor Pressure:	Not established
Solubility:	Soluble in water. Test in specific applications and systems.
Other Properties:	No further data

All Data shown above are typical values, not specifications.

SECTION 10: STABILITY AND REACTIVITY

Stability:

Product is expected to be stable under normal, ambient (controlled) conditions concerning heat, moisture, pressure, fire and ignition hazards, and ventilation. Contact with incompatible or reactive materials may cause hazardous reactions in some products if indicated. Check information below.

Hazardous Polymerization:

Product will not undergo polymerization.

Conditions to Avoid:

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Heat, moisture, incompatible materials.

Incompatible Materials:

Strong acids, bases, oxidizing agents, lithium, bromine trifluoride.

Hazardous Decomposition Products:

In fire: Oxides of carbon, nitrogen & sulfur. Hydrogen sulfide.

Possible Hazard Reactions:

May release an amount of chlorine gas in contact with strong acids.

SECTION 11: TOXICOLOGICAL INFORMATION

<u>Component</u>	<u>Eye Effect</u>	<u>Skin Effect</u>	<u>Skin Sens</u>	<u>Resp Sens</u>	<u>Oral LD50</u>	<u>Inh LC50</u>	<u>Mutagen</u>	<u>Other Tox Data</u>	<u>Other Info</u>
Confidential Red dye	May be moderate irritant	May be mild irritant	No Data	No Data	~Est. 3000 mg/kg	No Data	No Data	No Data	Long-term inhalation may injure respiratory tract.
Sodium monochloride (Color standardizer)	May be moderate irritant	May be mild irritant	No Data	No Data	3000 mg/kg (Rat)	> 2100 ml/m3 4 hr (Rat)	No Data	No Data	Long-term inhalation may injure respiratory tract
Confidential Black dye	Expected to be slight irritant	Expected to be slight irritant	No Data	No Data	Expected: ~ 5000 mg/kg (Rat)	Expected: 92.2 mg/m3/4 hr (Rat)	Mutagenic in bacteria. Human relevance unknown.	No Data	No Data
Disodium sulfate	May cause mechanical irritation	May cause mechanical irritation	No Data	No Data	5989 mg/kg (Rat)	No Data	Mutagen in mice. Human relevance unknown.	No Data	No Data
Sodium xylene sulfonate	Irritation, swelling, possible injury.	Irritation, redness, swelling.	No Data	No Data	4000 mg/kg (Rat)	No Data	No Data	No Data	Inhalation: Irritation, shortness of breath.

SECTION 12: ECOLOGICAL DATA

<u>Component</u>	<u>AOX</u>	<u>Aquatic Tox</u>	<u>BOD</u>	<u>Biodeg.</u>	<u>COD</u>	<u>Ecotoxicity</u>	<u>Sewage</u>	<u>Other Test Data</u>	<u>Other Info</u>
Confidential Red dye	No Data	May be harmful to freshwater species and plants	No Data	No Data	No Data	No Data	No Data	No Data	No Data
Sodium monochloride (Color standardizer)	No Data	May be harmful to freshwater species and plants.	No Data	No Data	No Data	No Data	No Data	No Data	No Data

SECTION 13: DISPOSAL AND ENVIRONMENTAL CONSIDERATION

Reuse of materials:

Reclaim all uncontaminated material to reuse, recycle or otherwise rework whenever possible.

Contain - Do not release:

Do not release into sewers, water systems, ground systems or ecosystems without proper authorization.

Disposal Methods:

Incinerate, treat, or bury (landfill), after sampling and testing, at facility approved by applicable federal, state, and local authorities.

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Empty Containers:

Empty containers may contain residue and/or vapors and should not be reused unless professionally cleaned and reconditioned. Crush if not cleaned, to prevent reuse.

Applicable Regulations: See Section 15 if regulated

Special Instructions: See Section 15 if regulated

SECTION 14: SHIPPING AND TRANSPORTATION INFORMATION

DOT Regulations (Ground):

NOT REGULATED

IATA Regulations (Air):

NOT REGULATED

IMDG / IMO Regulations (Water):

NOT REGULATED

SECTION 15: REGULATORY INFORMATION

FEDERAL AND STATE LISTS

Component	CAS Number	Weight %	Regulatory List
Confidential Red dye	Undisclosed	1 - 10%	No listings known to be applicable.
Sodium monochloride (Color standardizer)	7647-14-5	10 - 20%	No listings known to be applicable
Confidential Black dye	Undisclosed	1 - 10%	No listings known to be applicable.
Disodium sulfate	7757-82-6	.1 - 1%	State lists: MA, PA
Sodium xylene sulfonate	1300-72-7	1 - 10%	No listings known to be applicable.

SARA 311/312 Hazard Categories:

Immediate / Acute Health Hazard:	YES
Chronic / Delayed Hazard:	YES
Fire Hazard:	NO
Sudden Release of Pressure Hazard:	NO
Reactivity Hazard:	NO

GLOBAL CHEMICAL REGISTRATION LISTINGS:

AICS (Australia):	Components listed
DSL (Canada):	Components listed
ECL (Korea):	Components listed
EINECS (Europe):	Components listed
ENCS (Japan):	Components listed
IECSC (China):	Components listed
NZIoC (New Zealand):	Components listed
PICCS (Phillippines):	Components listed
TSCA (US):	Components listed

EU Reach:

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Keystone has taken all relative steps to ensure REACH-Compliance. Please contact us with any REACH-Related questions.

OTHER LISTINGS:

Other national or regional registrations not yet determined.

Additional Info:

For additional international, federal or state regulatory compliance information not shown: Call 312-666-2015.

SECTION 16: OTHER INFORMATION

Reason for Revision: New format. Complete review.

Reviewed: 040309

Disclaimer:

The information and recommendations contained herein are based upon data believed to be correct. However, no guarantee or warranty of any kind, expressed or implied, is made with respect to the information contained herein. This Safety Data Sheet was prepared to comply with the OSHA Hazard Communication Standard 29 CFR 1910.1200, and supersedes any previous information. Previously dated sheets are invalid and inapplicable.

END OF SDS