

MATERIAL SAFETY DATA SHEET**1. PRODUCT AND COMPANY IDENTIFICATION**

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Effective Date: 11/15/00 Print Date: 11/15/00 MSDS # 06

PRODUCT NAME: Southern Lithoplate™ RDC Rapid Access Developer/Replenisher Concentrate

PRODUCT CODE: 025-G RDC

2. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Ingredients (% by wt.)

COMPONENT	SYNONYM	CAS#	%
Water		7732-18-5	55 - 60
Diethylene glycol		111-46-6	5 - 10
Hydroquinone	1,4 dihydroxybenzene	123-73-2	5 - 10
Potassium Carbonate		584-08-7	5 - 10
Potassium Sulfite		10117-38-1	10 - 15
Sodium Sulfite		7757-83-7	5 - 10

OSHA REGULATORY STATUS

All ingredients listed are considered hazardous under OSHA regulations.

3. HAZARDS IDENTIFICATION**EMERGENCY OVERVIEW**

Clear yellowish liquid, negligible odor.

WARNING!

Causes eye and skin irritation.
May cause allergic skin reaction.
Harmful if swallowed.

POTENTIAL HEALTH EFFECTS

Eye: If contacted, causes eye irritation.

Skin: Contact causes skin irritation, may cause allergic reaction.

Ingestion: Harmful if swallowed.

Inhalation: No hazard in normal industrial use.

4. FIRST AID MEASURES

EYES: In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. If easy to do, remove contact lenses if worn. Call a physician.

SKIN: Immediately flush skin with plenty of water. Remove contaminated clothing and shoes. Call a physician if irritation develops and persists. Wash clothing before reuse.

INGESTION: If swallowed, do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Call a physician immediately.

INHALATION: No specific treatment is necessary since this material is not likely to be hazardous by inhalation. If exposed to excessive levels of dusts or fumes, remove to fresh air and get medical attention if cough or other symptoms develop.

5. FIRE FIGHTING MEASURES**FLAMMABLE PROPERTIES**

Material will not burn.

FLASH POINT: Not applicable

FLAMMABLE LIMITS: Not applicable

EXTINGUISHING MEDIA:

Use extinguishing method appropriate for surrounding fire.

FIRE & EXPLOSION HAZARDS

Hazardous decomposition products may include carbon dioxide, carbon monoxide, sulfur dioxide, and potassium oxides.

FIRE FIGHTING EQUIPMENT:

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Clean up spills immediately, observing precautions described in Personal Protection, (Section 8). Absorb the liquid with inert material then place in a suitable container. Neutralize by flushing residual area with detergent and water.

7. HANDLING AND STORAGE

Avoid contact with eyes and skin and clothing.

Store in a cool dry place.

STORAGE TEMPERATURE (MIN./MAX.): 40°F - 90°F

SHELF LIFE: 13 months

HANDLING AND STORAGE PRECAUTIONS: Keep container closed when not in use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

EYE PROTECTION REQUIREMENTS: Wear chemical safety goggles and face shield when eye and face contact is possible due to splashing or spraying of material. Do not wear contact lenses.

SKIN PROTECTION REQUIREMENTS: Wear impervious chemical-resistant gloves. In operations where splashing can occur, wear chemical-resistant aprons and boots to prevent contact with this material.

RESPIRATORY/VENTILATION REQUIREMENTS: Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. Use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits.

EXPOSURE LIMITS: (Have not been established or are not applicable unless listed below).

	OSHA PEL (TWA)	ACGIH TLV (TWA)
Hydroquinone	2mg/m ³	2mg/m ³

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical form: liquid

Color: clear, light yellow tint

Odor: negligible

Boiling Point: 212°F

Melt Point/Freeze Point: 32°F

pH: 10.8

Solubility in water: complete

Specific gravity: 1.25

Vapor Pressure: Not available

Vapor Density: Not available

10. STABILITY AND REACTIVITY

STABILITY: Stable

HAZARDOUS POLYMERIZATION: Will not occur

INCOMPATIBILITIES: (Diethylene glycol): strong oxidizing agents, materials reactive with hydroxyl compounds, strong bases and acids at high temperatures. (Hydroquinone): Strong oxidizers. (Potassium carbonate): acids, aluminum, magnesium, fluorine, chlorine trifluoride, silicon (Potassium sulfite): strong acids, strong oxidizing agents. (Sodium sulfite): acids, strong oxidizing agents, nitrates, nitrites. Reacts with acids to release sulfur dioxide.

DECOMPOSITION PRODUCTS: (Diethylene glycol): carbon dioxide, carbon monoxide. (Potassium carbonate): carbon dioxide, carbon monoxide, potassium oxides. (Potassium sulfite): sulfur dioxide, sulfur oxides. (Sodium sulfite): sulfur oxides, sulfur dioxide gas, sodium sulfide residue.

11. TOXICOLOGICAL INFORMATION

ACUTE: (Toxicity data are not available unless listed below).

Skin: For diethylene glycol, the LD₅₀ for rabbits is 11.9g/kg. For hydroquinone the LD₅₀ in guinea pigs is greater than 1,000 mg/kg. For sodium sulfite the LD₅₀ for rabbits is 300mg/kg.

Oral: For diethylene glycol the oral LD₅₀ for rats is 14.8g/kg. For hydroquinone, the oral LD₅₀ for rats is 400mg/kg; for humans the LD₅₀ is 70 – 170mg/kg(estimate). For potassium carbonate, the oral LD₅₀ for rats is 1,870mg/kg. For sodium sulfite the LD₅₀ for rats is 2,610mg/kg.

CRONIC

Skin: Prolonged or repeated skin contact may cause allergic reaction and dermatitis.

Carcinogenicity: (Hydroquinone): IARC Cancer review: Animal Inadequate evidence. IARC: Not classifiable as a human carcinogen (group 3). In NTP carcinogenesis studies, (Gavage); some evidence male and female rat, female mouse. No evidence male mouse. No other components present in this material at concentrations equal to or greater than 0.1%, are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

12. ECOLOGICAL INFORMATION

AQUATIC TOXICITY: (Toxicity data are not available unless listed below).

Hydroquinone: Goldfish 48H LC₅₀ .287mg/l, Golden Orfe 48H LC₅₀ .15 - .16mg/l, Rainbow Trout 96H LC₅₀ .097mg/l.

13. DISPOSAL CONSIDERATIONS

If this product as supplied becomes a waste, it does not meet the criteria of a hazardous waste as defined under Federal Hazardous Waste Regulations 40 CFR 261 (RCRA). Please be advised, however, that state and local requirements for waste disposal may be more restrictive or otherwise different from federal regulations. Consult state and local regulations regarding the proper disposal of this material. Empty containers must be handled with care due to product residue.

14. TRANSPORT INFORMATION**U.S. Department of Transportation (DOT)**

Proper Shipping Name: Not regulated

Hazard Class: Not applicable

Identification Number: Not applicable

Packing Group: Not applicable

Bill of Lading Description: "compounds, cleaning liquid, n.o.s".

15. REGULATORY INFORMATION

INVENTORY STATUS UNITED STATES (TSCA): All ingredients listed.

CERCLA/SUPERFUND, 40 CFR 117.302:

This material contains the following Reportable Quantity (RQ) substances:

hydroquinone 100#

SARA TITLE III:

Section 302 Extremely Hazardous Substances: Hydroquinone, TPQ 10,000#

Section 311/312 hazard categories: (Acute Health): Diethylene glycol, Hydroquinone, potassium carbonate, sodium sulfite. **(Chronic Health):** Diethylene glycol, Hydroquinone.

Section 313 toxic chemicals: Hydroquinone

16. OTHER INFORMATION

MSDS STATUS:

Prepared in accordance with ANSI Z400.1-1998. Revised 11/15/00 (New product)

LEGEND:

ACGIH	American Conference of Governmental Industrial Hygienists	PEL	Permissible Exposure Limit
CAS	Chemical Abstracts Service	RQ	Reportable Quantity
CERCLA	Comprehensive Environmental Response, Compensation and Liability Act	SARA	Superfund Amendments and Reauthorization Act
IARC	International Agency for Research on Cancer	STEL	Short Term Exposure Limit (15 minute time-weighted average)
NTP	National Toxicology Program	TLV	Threshold Limit Value
OSHA	Occupational Safety and Health Administration	TPQ	Threshold Planning Quantity
		TSCA	Toxic Substances Control Act
		TWA	8-hour time-weighted average

To the best of our knowledge, the information contained herein is accurate. However, Grafkem Corporation assumes no liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards which exist.

MSDS Date 6/24/09

End of MSDS

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