



SAFETY DATA SHEET

Revision Date 24-Jun-2015

Version 1

1. IDENTIFICATION

Products: Differential Rapid Blood Stain, Solution A (Component Product Code 2290)
Differential Rapid Blood Stain, Solution B (Component Product Code 2291)

Recommended Use For laboratory, scientific, R&D or manufacturing use.

Company E K Industries, Inc.
1403 Herkimer St.
Joliet, IL 60432
Tel. (800) 283-4244

Emergency Telephone Call CHEMTREC 1-800-424-9300 (EKI CCN 7453)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

These chemicals are not considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Label elements

Although these products do not normally require specific hazard precautions, chemical users should always take care to minimize personnel exposure and workplace contamination.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Differential Rapid Blood Stain, Solution A (Component Product Code 2290):

Chemical Name	CAS No.	Weight-%
Water	7732-18-5	>95
Potassium phosphate, monobasic	7778-77-0	<1
Sodium Phosphate, dibasic	7558-79-4	<1
Eosin Y disodium salt	17372-87-1	<1
Sodium azide	26628-22-8	<1

Differential Rapid Blood Stain, Solution B (Component Product Code 2291):

Chemical Name	CAS No.	Weight-%
Water	7732-18-5	>95
Potassium phosphate, monobasic	7778-77-0	<1
Sodium Phosphate, dibasic	7558-79-4	<1
Methylene blue	7220-79-3	<1
Azure A	531-53-3	<1

4. FIRST AID MEASURES

Description of first aid measures

General advice These chemicals are not expected to produce any significant adverse health effects.

Eye contact Flush eyes with plenty of water, removing contact lenses if present. Get medical attention if

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irritation develops.

Skin contact Wash thoroughly with soap and water while removing contaminated garments. Get medical attention if irritation develops.

Inhalation Remove to fresh air. Get medical attention for any breathing difficulty.

Ingestion Rinse mouth and drink several glasses of water. Contact a physician or poison control center if symptoms develop.

Most important symptoms and effects, both acute and delayed

Symptoms No information available.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment

Specific hazards arising from the chemical

No information available.

Protective equipment and precautions for firefighters

Firefighters should wear self-contained breathing apparatus with full facepiece operated in pressure-demand or other positive pressure mode.

NFPA **Health hazards** 0 **Flammability** 0 **Instability** 0 **Physical and Chemical Properties** -

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Ensure adequate ventilation, especially in confined areas.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Absorb spill with inert material, scoop up and containerize for disposal.

7. HANDLING AND STORAGE

Precautions for safe handling Handle in accordance with good industrial hygiene and safety practice.

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

Incompatible materials None known based on information supplied.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sodium azide 26628-22-8	Ceiling: 0.29 mg/m ³ NaN ₃ Ceiling: 0.11 ppm Hydrazoic acid vapor	(vacated) Skin (vacated) Ceiling: 0.1 ppm HN ₃ (vacated) Ceiling: 0.3 mg/m ³ NaN ₃	Ceiling: 0.1 ppm HN ₃ Ceiling: 0.3 mg/m ³ NaN ₃

Appropriate engineering controls

Engineering Controls Emergency showers, eyewash stations, ventilation systems.

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Individual protection measures, such as personal protective equipment

Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin and body protection	Wear protective gloves and protective clothing.
Respiratory protection	If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.**9. PHYSICAL AND CHEMICAL PROPERTIES****Information on basic physical and chemical properties**

Physical state	Liquid
Appearance	Solution A (#2290): Red Solution B (#2291): Blue
Odor	No information available
Odor threshold	No information available
pH	No information available
Melting point / freezing point	No information available
Boiling point / boiling range	No information available
Flash point	No information available
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Flammability Limit in Air	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor pressure	No information available
Vapor density	No information available
Relative density	No information available
Water solubility	Miscible with water
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Kinematic viscosity	No information available

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	None under normal processing.
Conditions to avoid	Extremes of temperature and direct sunlight
Incompatible materials	None known based on information supplied.
Hazardous Decomposition Products	None known based on information supplied.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

Inhalation	No data available.
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Eye contact	No data available.
Skin contact	No data available.
Ingestion	No data available.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Potassium phosphate, monobasic 7778-77-0	-	> 4640 mg/kg (Rabbit)	-
Sodium Phosphate, dibasic 7558-79-4	= 17 g/kg (Rat)	-	-

Information on toxicological effects**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

Sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	The table below indicates whether each agency has listed any ingredient as a carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA
Eosin Y disodium salt 17372-87-1	-	Group 3	-	-
Methylene blue 7220-79-3	-	Group 3	-	-

IARC (International Agency for Research on Cancer)
Group 3 - Not classifiable as to carcinogenicity in humans

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Sodium azide 26628-22-8	-	0.8: 96 h Oncorhynchus mykiss mg/L LC50 0.7: 96 h Lepomis macrochirus mg/L LC50 5.46: 96 h Pimephales promelas mg/L LC50 flow-through	-

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS**Waste treatment methods****Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging

Do not reuse container. Emptied containers may contain residue. Continue to follow label warnings after container is emptied.

Chemical Name	RCRA - Halogenated Organic Compounds	RCRA - P Series Wastes	RCRA - F Series Wastes	RCRA - K Series Wastes
Sodium azide 26628-22-8	-	P105	-	-

Chemical Name	California Hazardous Waste Status

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Sodium azide 26628-22-8	Ignitable Reactive
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14. TRANSPORT INFORMATION

Transportation information is provided as a general reference only and may not be applicable in all situations. This information applies to non-bulk shipments only. Per 49 CRF 173.22, it is the shipper's responsibility to ensure that all materials are properly packaged, classified and labeled prior to shipment.

DOT Not regulated**IATA** Not regulated**15. REGULATORY INFORMATION****US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). These products contain a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
Sodium azide - 26628-22-8	1.0

SARA 311/312 Hazard Categories

Acute health hazard	No
Chronic Health Hazard	No
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

These products contain the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Sodium Phosphate, dibasic 7558-79-4	5000 lb	-	-	X

CERCLA

These materials, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Sodium Phosphate, dibasic 7558-79-4	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ
Sodium azide 26628-22-8	1000 lb	1000 lb	RQ 1000 lb final RQ RQ 454 kg final RQ

US State Regulations**California Proposition 65**

These products do not contain any Proposition 65 chemicals

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Sodium Phosphate, dibasic 7558-79-4	X	X	X
Sodium azide 26628-22-8	X	X	X

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16. OTHER INFORMATION

Prepared By
Revision Date
Disclaimer

EKI Regulatory Affairs (Email: reg@eki-chem.com)
24-Jun-2015

E K Industries, Inc. makes no representation as to the comprehensiveness or accuracy of this document. Individuals using this information, or the product to which it refers, must exercise their independent judgment in determining all appropriateness for a particular purpose. Accordingly, E K Industries, Inc. will not be responsible for damages of any kind or nature resulting from the use of this information or the corresponding product. No representations or warranties of any kind or nature, including but not limited to: express warranties, implied warranties or merchantability, or warranties of fitness for a particular purpose, are made hereunder with respect to the information set forth herein or to the product to which the information refers.



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1. IDENTIFICATION

Product Name	Differential Rapid Blood Stain, Solution C
Product Code	2292
Recommended Use	For laboratory, scientific, R&D or manufacturing use.
Company	E K Industries, Inc. 1403 Herkimer St. Joliet, IL 60432 Tel. (800) 283-4244
Emergency Telephone	Call CHEMTREC 1-800-424-9300 (EKI CCN 7453)

2. HAZARDS IDENTIFICATION

Classification

OSHA Regulatory Status

This chemical is considered hazardous by the 2012 OSHA Hazard Communication Standard (29 CFR 1910.1200)

Acute toxicity - Oral	Category 3
Acute toxicity - Dermal	Category 3
Acute toxicity - Inhalation (Dusts/Mists)	Category 3
Specific target organ toxicity (single exposure)	Category 1
Flammable liquids	Category 2

Label elements

Signal word

Danger

Hazard statements

Toxic if swallowed. Toxic in contact with skin. Toxic if inhaled. Causes damage to organs.
Highly flammable liquid and vapor.



Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling. Do not eat, drink or smoke when using this product. Wear protective gloves/protective clothing/eye protection/face protection. Use only outdoors or in a well-ventilated area. Do not breathe dust/fume/gas/mist/vapors/spray. Keep away from heat/sparks/open flames/hot surfaces. — No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting/equipment. Use only

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non-sparking tools. Take precautionary measures against static discharge. Keep cool.

Precautionary Statements - Response

IF exposed: Call a POISON CENTER or doctor/physician.

IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Wash contaminated clothing before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician.

IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician. Rinse mouth.

In case of fire: Use CO₂, dry chemical, or foam for extinction.

Precautionary Statements - Storage

Store locked up. Store in a well-ventilated place. Keep container tightly closed.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%
Methyl alcohol	67-56-1	100

4. FIRST AID MEASURES

Description of first aid measures

Eye contact	Immediately flush with plenty of water for at least 15 minutes, separating eyelids occasionally. Remove contact lenses if present. Get immediate medical attention.
Skin contact	Wash thoroughly with soap and water while removing contaminated garments. Get medical attention if irritation develops.
Inhalation	Remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get immediate medical attention.
Ingestion	Do NOT induce vomiting unless instructed to do so by medical personnel. If conscious, rinse mouth and give several glasses of water to drink. Never give anything by mouth to an unconscious person. Get immediate medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms	Causes skin and eye irritation. If swallowed or inhaled, causes irritation. Intoxicant. May cause headache, drowsiness, nausea, vomiting, blurred vision, blindness, coma, and death.
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5. FIRE-FIGHTING MEASURES

Suitable extinguishing media

Water spray (fog) CO₂, dry chemical, dry sand, alcohol-resistant foam

Specific hazards arising from the chemical

Vapors can flow along surfaces to distant ignition sources and flash back. May form explosive mixtures with air.

Hazardous combustion products Carbon dioxide (CO₂).

Protective equipment and precautions for firefighters

Firefighters should wear self-contained breathing apparatus with full facepiece operated in pressure-demand or other positive pressure mode.

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NFPA **Health hazards** 1 **Flammability** 3 **Instability** 0 **Physical and Chemical Properties** -

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions Remove all sources of ignition. Take precautionary measures against static discharges. Ensure adequate ventilation, especially in confined areas. Wear protective gloves/protective clothing and eye/face protection.

Environmental precautions Prevent product from entering drains.

Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Absorb spill with inert material, scoop up and containerize for disposal.

7. HANDLING AND STORAGE

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Use personal protective equipment as required. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Take precautionary measures against static discharges.

Storage Conditions Keep container tightly closed in a dry and well-ventilated place. Store in an approved Flammable Liquids storage area.

Incompatible materials Strong oxidizing agents. Aluminum. Zinc.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational exposure limits

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Methyl alcohol 67-56-1	STEL: 250 ppm TWA: 200 ppm Skin	TWA: 200 ppm TWA: 260 mg/m ³ (vacated) TWA: 200 ppm (vacated) TWA: 260 mg/m ³ (vacated) STEL: 250 ppm (vacated) STEL: 325 mg/m ³ (vacated) Skin	IDLH: 6000 ppm TWA: 200 ppm TWA: 260 mg/m ³ STEL: 250 ppm STEL: 325 mg/m ³

Appropriate engineering controls

Engineering Controls Emergency showers, eyewash stations, ventilation systems.

Individual protection measures, such as personal protective equipment

Eye/face protection Tight sealing safety goggles.

Skin and body protection Wear protective gloves and protective clothing. Wear fire/flame resistant/retardant clothing.

Respiratory protection If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respiratory protection must be provided in accordance with current local regulations.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

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Information on basic physical and chemical properties

Physical state	Liquid
Appearance	Green
Odor	Characteristic
Odor threshold	No information available
pH	No information available
Melting point / freezing point	-98 C
Boiling point / boiling range	64.5 C
Flash point	12 C
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Flammability Limit in Air	
Upper flammability limit:	36%
Lower flammability limit:	6%
Vapor pressure	No information available
Vapor density	No information available
Relative density	No information available
Water solubility	Miscible with water
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	464 C
Decomposition temperature	No information available
Kinematic viscosity	No information available

10. STABILITY AND REACTIVITY

Stability	Stable under recommended storage conditions.
Possibility of Hazardous Reactions	Risk of explosion with oxidizing agents, perchlorates, nitrogen oxides, halogens, hydrogen peroxide ,nitric acid.
Conditions to avoid	Extremes of temperature and direct sunlight Sources of ignition
Incompatible materials	Strong oxidizing agents. Aluminum. Zinc.
Hazardous Decomposition Products	Carbon monoxide. Carbon dioxide (CO2). Formaldehyde.

11. TOXICOLOGICAL INFORMATION**Information on likely routes of exposure**

Inhalation	Toxic by inhalation.
Eye contact	No data available.
Skin contact	Toxic in contact with skin.
Ingestion	Toxic if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Methyl alcohol 67-56-1	= 5628 mg/kg (Rat)	-	= 83.2 mg/L (Rat) 4 h

Information on toxicological effects**Delayed and immediate effects as well as chronic effects from short and long-term exposure**

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Sensitization	No information available.
Germ cell mutagenicity	No information available.
Carcinogenicity	This chemical does not contain any carcinogens or potential carcinogens as listed by ACGIH, OSHA, IARC or NTP
STOT - single exposure	- Respiratory system - Central nervous system - Optic nerve

12. ECOLOGICAL INFORMATION**Ecotoxicity**

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Methyl alcohol 67-56-1	-	28200: 96 h Pimephales promelas mg/L LC50 flow-through 100: 96 h Pimephales promelas mg/L LC50 static 19500 - 20700: 96 h Oncorhynchus mykiss mg/L LC50 flow-through 18 - 20: 96 h Oncorhynchus mykiss mL/L LC50 static 13500 - 17600: 96 h Lepomis macrochirus mg/L LC50 flow-through	-

Persistence and degradability

No information available.

Bioaccumulation

No information available.

Chemical Name	Partition coefficient
Methyl alcohol 67-56-1	-0.77

Other adverse effects

No information available

13. DISPOSAL CONSIDERATIONS**Waste treatment methods****Disposal of wastes**

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging

Do not reuse container. Emptied containers may contain residue. Continue to follow label warnings after container is emptied.

Chemical Name	RCRA	RCRA - Basis for Listing	RCRA - D Series Wastes	RCRA - U Series Wastes
Methyl alcohol 67-56-1	-	Included in waste stream: F039	-	U154

Chemical Name	California Hazardous Waste Status
Methyl alcohol 67-56-1	Toxic Ignitable

14. TRANSPORT INFORMATION

Transportation information is provided as a general reference only and may not be applicable in all situations. This information applies to non-bulk shipments only. Per 49 CRF 173.22, it is the shipper's responsibility to ensure that all materials are properly packaged, classified and labeled prior to shipment.

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DOT

UN/ID no. 1230
 Proper shipping name Methanol
 Hazard Class 3
 Packing Group II
 Reportable Quantity (RQ) 5000 lbs

IATA

UN/ID no. 1230
 Proper shipping name Methanol
 Hazard Class 3
 Subsidiary hazard class 6.1
 Packing Group II

15. REGULATORY INFORMATION**US Federal Regulations****SARA 313**

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	SARA 313 - Threshold Values %
Methyl alcohol - 67-56-1	1.0

SARA 311/312 Hazard Categories

Acute health hazard No
 Chronic Health Hazard No
 Fire hazard No
 Sudden release of pressure hazard No
 Reactive Hazard No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Methyl alcohol 67-56-1	5000 lb	-	RQ 5000 lb final RQ RQ 2270 kg final RQ

US State Regulations**California Proposition 65**

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
Methyl alcohol - 67-56-1	Developmental

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Methyl alcohol 67-56-1	X	X	X

16. OTHER INFORMATION

Prepared By

EKI Regulatory Affairs (Email: reg@eki-chem.com)

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Disclaimer

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End of Safety Data Sheet