

A.M.T.S. MATERIAL SAFETY DATA SHEET

REVISED
4/28/2003

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

MSDS CODE **SSKC417**
TRADE NAME **1% ALCIAN BLUE SOLUTION**
PRODUCT DESCRIPTION **FROM RUSSELL-MOVAT PENTACHROME STAIN KIT**

SUPPLIER: **AMERICAN MASTER*TECH SCIENTIFIC, INC.**
P.O. BOX 2539
LODI, CA 95241-2539
(209) 368-4031

IN CASE OF EMERGENCY CONTACT INFOTRAC: 800-535-5053 (24 HOURS)

SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS

<u>NAME</u>	<u>CAS #</u>	<u>OSHA PELTW</u>	<u>OSHA STEL</u>	<u>ACGIH TLV</u>	<u>ACGIH STEL</u>
WATER	7732-18-5	N/E	N/E	N/E	N/E
ALCIAN BLUE, CERTIFIED	12040-44-7	N/E	N/E	N/E	N/E
ACETIC ACID	64-19-7	10 PPM	N/E	10 PPM	15 PPM

N/E = EXPOSURE LIMITS ARE NOT ESTABLISHED
C = THRESHOLD LEVEL VALUE, CEILING
PNOC = PARTICULATES NOT OTHERWISE CLASSIFIED

N/A = NOT AVAILABLE
ND = NUISANCE DUSTS
RD = RESPIRABLE DUSTS

A = ACTION LEVEL
S = SKIN CONTACT

SECTION 3: PHYSICAL AND CHEMICAL PROPERTIES**APPEARANCE / ODOR**

Dark blue opaque liquid; weak acid odor.

SPECIFIC GRAVITY

1

SOLUBILITY IN WATER

Soluble

VAPOR DENSITY

N/A

VAPOR PRESSURE

N/A

EVAPORATION RATE

N/A

MELTING POINT

N/A

BOILING POINT

100° C

FLASH POINT

Aqueous Solution

AUTO-IGNITION TEMP

Aqueous Solution

LOWER EXPLOSIVE LIMIT IN AIR

Aqueous Solution

UPPER EXPLOSIVE LIMIT IN AIR

Aqueous Solution

SECTION 4: FIRE AND EXPLOSION INFORMATION**WATER SPRAY**

YES

CARBON DIOXIDE

YES

FOAM, ALCOHOL / CHEMICAL

CHEMICAL

DRY CHEMICAL

YES

OTHER

N/A

SPECIAL FIRE FIGHTING PROCEDURES

Wear appropriate personal protection equipment, including a self-contained breathing apparatus (S.C.B.A.).

UNUSUAL FIRE / EXPLOSION HAZARDS

None expected

SECTION 5: REACTIVITY AND STABILITY DATA**STABILITY**

Stable

INCOMPATIBLE MATERIALS

Bases, oxidizers.

HAZARDOUS DECOMPOSITION PRODUCTS

Carbon oxides.

HAZARDOUS POLYMERIZATION

Not reported.

HAZARDOUS POLYMERIZATION CONDITIONS TO AVOID

None known.

SECTION 6: ACCIDENTAL RELEASE MEASURES AND DISPOSAL CONSIDERATIONS:**SPILL RESPONSE PROCEDURES**

Use personal protection equipment and standard laboratory safety procedures for cleanup. Wipe up spill or absorb using a dry inert material and place waste in a suitable container. Clean spill area with soap and water.

WASTE DISPOSAL PROCEDURE

Dispose all waste in accordance with local, state, and federal regulations.

SECTION 7: HAZARDS IDENTIFICATION:**SYMPTOMS OF ACUTE OVEREXPOSURE****INHALATION**

Not an expected route of exposure.

CONTACT WITH EYES

May irritate eyes, with stinging, watering, inflammation.

CONTACT WITH SKIN

May irritate skin, with stinging, itching, inflammation.

INGESTION

May irritate gastrointestinal system, with nausea, vomiting, diarrhea.

SYMPTOMS AND HEALTH EFFECTS OF CHRONIC EXPOSURE**INHALATION**

Unknown.

EYE CONTACT

Unknown.

SKIN CONTACT

Unknown.

INGESTION

Unknown.

FIRST AID MEASURES:**EYE CONTACT**

Remove contact lenses if worn and flush eyes with copious amounts of water or buffered saline eye wash solution. Get medical attention.

SKIN CONTACT

Remove contaminated clothing and wash contact area thoroughly with mild soap and plenty of water. Get medical attention if irritation develops.

INHALATION

Remove person to fresh air and treat symptomatically. Get medical attention if symptoms worsen.

INGESTION

Get immediate medical attention.

SECTION 7: HAZARDS IDENTIFICATION, continued**CARCINOGENICITY****NTP**

Not listed.

IARC

Not listed.

OSHA

Not listed.

CALIFORNIA PROPOSITION 65 WARNINGS

Not listed.

EPCRA SECTION 313 SUPPLIER NOTIFICATION**MEDICAL CONDITIONS AGGRAVATED BY PROLONGED EXPOSURE**

Unknown.

SECTION 8: HANDLING INFORMATION / EXPOSURE CONTROLS**HMIS HAZARD CODES****HEALTH HAZARD****1** Minimal: Use standard safety procedures.**FIRE HAZARD****0** Non-Flammable: No significant risk of fire or explosion.**REACTIVITY****0** Non-Reactive: Will not react with water or most inert chemicals.**EQUIPMENT****B** Wear chemical apron, gloves, and splash goggles in addition to all standard laboratory safety equipment.**VENTILATION**

Local Dilution Exhaust

PERSONAL HYGIENE

Wash hands thoroughly with soap and water before eating or drinking.

NOTICE TO READER: American Master*Tech Scientific Inc. believes the information contained in this Material Safety Data Sheet (MSDS) is current as of the Revision Date, but can not guarantee that the information is all inclusive. Any chemical may pose unknown hazards; if this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. User is responsible for determining appropriate methods of personal protection, handling, use, storage, and disposal of this product. User assumes all liability for any incidental or consequential damage resulting from the use of this product.

A.M.T.S. MATERIAL SAFETY DATA SHEET

REVISED
4/28/2003

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

MSDS CODE **SSKC411**
TRADE NAME **10% ALCOHOLIC HEMATOXYLIN**
PRODUCT DESCRIPTION
FROM RUSSELL-MOVAT PENTACHROME STAIN KIT

SUPPLIER: **AMERICAN MASTER*TECH SCIENTIFIC, INC.**
P.O. BOX 2539
LODI, CA 95241-2539
(209) 368-4031

IN CASE OF EMERGENCY CONTACT INFOTRAC: 800-535-5053 (24 HOURS)

SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS

<u>NAME</u>	<u>CAS #</u>	<u>OSHA PELTW</u>	<u>OSHA STEL</u>	<u>ACGIH TLV</u>	<u>ACGIH STEL</u>
ETHYL ALCOHOL (ETHANOL)	64-17-5	1000 PPM	N/E	1000 PPM	N/E
HEMATOXYLIN	517-28-2	15 mg/M3 ND	N/E	10 mg/M3 PNOC	N/E

N/E = EXPOSURE LIMITS ARE NOT ESTABLISHED
C = THRESHOLD LEVEL VALUE, CEILING
PNOC = PARTICULATES NOT OTHERWISE CLASSIFIED

N/A = NOT AVAILABLE
ND = NUISANCE DUSTS
RD = RESPIRABLE DUSTS

A = ACTION LEVEL
S = SKIN CONTACT

SECTION 3: PHYSICAL AND CHEMICAL PROPERTIES**APPEARANCE / ODOR**

Rust-brown transparent liquid; alcohol odor.

SPECIFIC GRAVITY

0.789 @ 20° C [Ethanol]

SOLUBILITY IN WATER

Soluble

VAPOR DENSITY

1.60 [Ethanol]

VAPOR PRESSURE

44.2 @ 20°C [Ethanol]

EVAPORATION RATE

3.30 [Ethanol]

MELTING POINT

-117° C [Ethanol]

BOILING POINT

78.3° C [Ethanol]

FLASH POINT

15.5° C [Ethanol]

AUTO-IGNITION TEMP

399° C [Ethanol]

LOWER EXPLOSIVE LIMIT IN AIR

3.3% [Ethanol]

UPPER EXPLOSIVE LIMIT IN AIR

19% [Ethanol]

SECTION 4: FIRE AND EXPLOSION INFORMATION**WATER SPRAY**

NO

CARBON DIOXIDE

YES

FOAM, ALCOHOL / CHEMICAL

ALCOHOL

DRY CHEMICAL

YES

OTHER

N/A

SPECIAL FIRE FIGHTING PROCEDURES

Wear appropriate personal protection equipment, including a self-contained breathing apparatus (S.C.B.A.).

UNUSUAL FIRE / EXPLOSION HAZARDS

Flammable vapors are heavier than air and may travel along the ground to a distant ignition source and flash back.

SECTION 5: REACTIVITY AND STABILITY DATA**STABILITY**

Stable

INCOMPATIBLE MATERIALS

Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Carbon oxides, various hydrocarbons.

HAZARDOUS POLYMERIZATION

Not reported.

HAZARDOUS POLYMERIZATION CONDITIONS TO AVOID

None known.

SECTION 6: ACCIDENTAL RELEASE MEASURES AND DISPOSAL CONSIDERATIONS:**SPILL RESPONSE PROCEDURES**

Use personal protection equipment and standard laboratory safety procedures for cleanup. Keep away from heat, flame, ignition sources, and reactive materials. Wipe up spill or absorb using a dry inert material and place waste in a suitable container.

Clean spill area with soap and water.

WASTE DISPOSAL PROCEDURE

Dispose all waste in accordance with local, state, and federal regulations.

SECTION 7: HAZARDS IDENTIFICATION:**SYMPTOMS OF ACUTE OVEREXPOSURE****INHALATION**

May irritate respiratory tract, with stinging, burning, coughing.

CONTACT WITH EYES

May irritate eyes, with stinging, watering, burning, inflammation.

CONTACT WITH SKIN

May irritate skin, with stinging, itching, inflammation, drying.

INGESTION

May cause dizziness, drowsiness, lack of coordination, and abdominal discomfort, with nausea, vomiting, diarrhea.

SYMPTOMS AND HEALTH EFFECTS OF CHRONIC EXPOSURE**INHALATION**

Unknown.

EYE CONTACT

Unknown.

SKIN CONTACT

Unknown.

INGESTION

Unknown.

FIRST AID MEASURES:**EYE CONTACT**

Remove contact lenses if worn and flush eyes with copious amounts of water or buffered saline eye wash solution. Get immediate medical attention.

SKIN CONTACT

Remove contaminated clothing and wash contact area thoroughly with mild soap and plenty of water. Get medical attention if irritation develops.

INHALATION

Remove person to fresh air and treat symptomatically. Get medical attention if symptoms worsen.

INGESTION

Get immediate medical attention.

SECTION 7: HAZARDS IDENTIFICATION, continued**CARCINOGENICITY****NTP**

Not listed.

IARC

Not listed.

OSHA

Not listed.

CALIFORNIA PROPOSITION 65 WARNINGS

Not listed.

EPCRA SECTION 313 SUPPLIER NOTIFICATION**MEDICAL CONDITIONS AGGRAVATED BY PROLONGED EXPOSURE**

Unknown.

SECTION 8: HANDLING INFORMATION / EXPOSURE CONTROLS**HMIS HAZARD CODES****HEALTH HAZARD****1** Minimal: Use standard safety procedures.**FIRE HAZARD****3** High: Very likely to ignite on contact with spark or flame.**REACTIVITY****0** Non-Reactive: Will not react with water or most inert chemicals.**EQUIPMENT****G** Use organic solvent rated respirator, chemical goggles, apron, and gloves in addition to all standard laboratory safety equipment.**VENTILATION**

Local Dilution Exhaust

PERSONAL HYGIENE

Wash hands thoroughly with soap and water before eating or drinking.

NOTICE TO READER: American Master*Tech Scientific Inc. believes the information contained in this Material Safety Data Sheet (MSDS) is current as of the Revision Date, but can not guarantee that the information is all inclusive. Any chemical may pose unknown hazards; if this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. User is responsible for determining appropriate methods of personal protection, handling, use, storage, and disposal of this product. User assumes all liability for any incidental or consequential damage resulting from the use of this product.

A.M.T.S. MATERIAL SAFETY DATA SHEET

REVISED
4/28/2003

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

MSDS CODE **SSKC41A**
TRADE NAME **ALCOHOLIC SAFFRON SOLUTION**
PRODUCT DESCRIPTION
FROM RUSSELL-MOVAT PENTACHROME STAIN KIT

SUPPLIER: **AMERICAN MASTER*TECH SCIENTIFIC, INC.**
P.O. BOX 2539
LODI, CA 95241-2539
(209) 368-4031

IN CASE OF EMERGENCY CONTACT INFOTRAC: 800-535-5053 (24 HOURS)

SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS

<u>NAME</u>	<u>CAS #</u>	<u>OSHA PELTW</u>	<u>OSHA STEL</u>	<u>ACGIH TLV</u>	<u>ACGIH STEL</u>
ETHYL ALCOHOL (ETHANOL)	64-17-5	1000 PPM	N/E	1000 PPM	N/E
SAFFRON [CI 75100]	P/N 5A 394	N/E	N/E	N/E	N/E

N/E = EXPOSURE LIMITS ARE NOT ESTABLISHED
C = THRESHOLD LEVEL VALUE, CEILING
PNOC = PARTICULATES NOT OTHERWISE CLASSIFIED

N/A = NOT AVAILABLE
ND = NUISANCE DUSTS
RD = RESPIRABLE DUSTS

A = ACTION LEVEL
S = SKIN CONTACT

SECTION 3: PHYSICAL AND CHEMICAL PROPERTIES**APPEARANCE / ODOR**

Rust-brown transparent liquid; alcohol odor.

SPECIFIC GRAVITY

0.789 @ 20° C [Ethanol]

SOLUBILITY IN WATER

Soluble

VAPOR DENSITY

1.60 [Ethanol]

VAPOR PRESSURE

44.2 @ 20°C [Ethanol]

EVAPORATION RATE

3.30 [Ethanol]

MELTING POINT

-117° C [Ethanol]

BOILING POINT

78.3° C [Ethanol]

FLASH POINT

15.5° C [Ethanol]

AUTO-IGNITION TEMP

399° C [Ethanol]

LOWER EXPLOSIVE LIMIT IN AIR

3.3% [Ethanol]

UPPER EXPLOSIVE LIMIT IN AIR

19% [Ethanol]

SECTION 4: FIRE AND EXPLOSION INFORMATION**WATER SPRAY**

NO

CARBON DIOXIDE

YES

FOAM, ALCOHOL / CHEMICAL

ALCOHOL

DRY CHEMICAL

YES

OTHER

N/A

SPECIAL FIRE FIGHTING PROCEDURES

Wear appropriate personal protection equipment, including a self-contained breathing apparatus (S.C.B.A.).

UNUSUAL FIRE / EXPLOSION HAZARDS

Flammable vapors are heavier than air and may travel along the ground to a distant ignition source and flash back.

SECTION 5: REACTIVITY AND STABILITY DATA**STABILITY**

Stable

INCOMPATIBLE MATERIALS

Strong oxidizing agents.

HAZARDOUS DECOMPOSITION PRODUCTS

Carbon oxides, various hydrocarbons.

HAZARDOUS POLYMERIZATION

Not reported.

HAZARDOUS POLYMERIZATION CONDITIONS TO AVOID

None known.

SECTION 6: ACCIDENTAL RELEASE MEASURES AND DISPOSAL CONSIDERATIONS:**SPILL RESPONSE PROCEDURES**

Use personal protection equipment and standard laboratory safety procedures for cleanup. Keep away from heat, flame, ignition sources, and reactive materials. Wipe up spill or absorb using a dry inert material and place waste in a suitable container.

Clean spill area with soap and water.

WASTE DISPOSAL PROCEDURE

Dispose all waste in accordance with local, state, and federal regulations.

SECTION 7: HAZARDS IDENTIFICATION:**SYMPTOMS OF ACUTE OVEREXPOSURE****INHALATION**

May irritate respiratory tract, with stinging, burning, coughing.

CONTACT WITH EYES

May irritate eyes, with stinging, watering, burning, inflammation.

CONTACT WITH SKIN

May irritate skin, with stinging, itching, inflammation, drying.

INGESTION

May cause dizziness, drowsiness, lack of coordination, and abdominal discomfort, with nausea, vomiting, diarrhea.

SYMPTOMS AND HEALTH EFFECTS OF CHRONIC EXPOSURE**INHALATION**

Unknown.

EYE CONTACT

Unknown.

SKIN CONTACT

Unknown.

INGESTION

Unknown.

FIRST AID MEASURES:**EYE CONTACT**

Remove contact lenses if worn and flush eyes with copious amounts of water or buffered saline eye wash solution. Get immediate medical attention.

SKIN CONTACT

Remove contaminated clothing and wash contact area thoroughly with mild soap and plenty of water. Get medical attention if irritation develops.

INHALATION

Remove person to fresh air and treat symptomatically. Get medical attention if symptoms worsen.

INGESTION

Get immediate medical attention.

SECTION 7: HAZARDS IDENTIFICATION, continued

CARCINOGENICITY

NTP

Not listed.

IARC

Not listed.

OSHA

Not listed.

CALIFORNIA PROPOSITION 65 WARNINGS

Not listed.

EPCRA SECTION 313 SUPPLIER NOTIFICATION

MEDICAL CONDITIONS AGGRAVATED BY PROLONGED EXPOSURE

Unknown.

SECTION 8: HANDLING INFORMATION / EXPOSURE CONTROLS

HMIS HAZARD CODES

HEALTH HAZARD**1** Minimal: Use standard safety procedures.FIRE HAZARD**3** High: Very likely to ignite on contact with spark or flame.REACTIVITY**0** Non-Reactive: Will not react with water or most inert chemicals.EQUIPMENT**G** Use organic solvent rated respirator, chemical goggles, apron, and gloves in addition to all standard laboratory safety equipment.

VENTILATION

Local Dilution Exhaust

PERSONAL HYGIENE

Wash hands thoroughly with soap and water before eating or drinking.

NOTICE TO READER: American Master*Tech Scientific Inc. believes the information contained in this Material Safety Data Sheet (MSDS) is current as of the Revision Date, but can not guarantee that the information is all inclusive. Any chemical may pose unknown hazards; if this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. User is responsible for determining appropriate methods of personal protection, handling, use, storage, and disposal of this product. User assumes all liability for any incidental or consequential damage resulting from the use of this product.

A.M.T.S. MATERIAL SAFETY DATA SHEET

REVISED
4/28/2003

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

MSDS CODE **SSKC41B**
TRADE NAME **CROCEIN SCARLET / ACID FUCHSIN**
PRODUCT DESCRIPTION
FROM RUSSELL-MOVAT PENTACHROME STAIN KIT

SUPPLIER: **AMERICAN MASTER*TECH SCIENTIFIC, INC.**
P.O. BOX 2539
LODI, CA 95241-2539
(209) 368-4031

IN CASE OF EMERGENCY CONTACT INFOTRAC: 800-535-5053 (24 HOURS)

SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS

<u>NAME</u>	<u>CAS #</u>	<u>OSHA PELTW</u>	<u>OSHA STEL</u>	<u>ACGIH TLV</u>	<u>ACGIH STEL</u>
WATER	7732-18-5	N/E	N/E	N/E	N/E
BIEBRICH SCARLET [Crocein Scarlet]	4196-99-0	N/E	N/E	N/E	N/E
ACID FUCHSIN	3244-88-0	N/E	N/E	N/E	N/E
ACETIC ACID	64-19-7	10 PPM	N/E	10 PPM	15 PPM

N/E = EXPOSURE LIMITS ARE NOT ESTABLISHED
C = THRESHOLD LEVEL VALUE, CEILING
PNOC = PARTICULATES NOT OTHERWISE CLASSIFIED

N/A = NOT AVAILABLE
ND = NUISANCE DUSTS
RD = RESPIRABLE DUSTS

A = ACTION LEVEL
S = SKIN CONTACT

SECTION 3: PHYSICAL AND CHEMICAL PROPERTIES**APPEARANCE / ODOR**

Dark reddish black opaque liquid; mild acid odor.

SPECIFIC GRAVITY

1

SOLUBILITY IN WATER

Soluble

VAPOR DENSITY

N/A

VAPOR PRESSURE

N/A

EVAPORATION RATE

N/A

MELTING POINT

N/A

BOILING POINT

100° C

FLASH POINT

Aqueous Solution

AUTO-IGNITION TEMP

Aqueous Solution

LOWER EXPLOSIVE LIMIT IN AIR

Aqueous Solution

UPPER EXPLOSIVE LIMIT IN AIR

Aqueous Solution

SECTION 4: FIRE AND EXPLOSION INFORMATION**WATER SPRAY**

YES

CARBON DIOXIDE

YES

FOAM, ALCOHOL / CHEMICAL

CHEMICAL

DRY CHEMICAL

YES

OTHER

N/A

SPECIAL FIRE FIGHTING PROCEDURES

Wear appropriate personal protection equipment, including a self-contained breathing apparatus (S.C.B.A.).

UNUSUAL FIRE / EXPLOSION HAZARDS

May release metal oxides under fire conditions.

SECTION 5: REACTIVITY AND STABILITY DATA**STABILITY**

Stable

INCOMPATIBLE MATERIALS

Strong bases, oxidizers, metals.

HAZARDOUS DECOMPOSITION PRODUCTS

Carbon oxides, nitrogen oxides, sulfur oxides, some metallic oxides.

HAZARDOUS POLYMERIZATION

Not reported.

HAZARDOUS POLYMERIZATION CONDITIONS TO AVOID

None known.

SECTION 6: ACCIDENTAL RELEASE MEASURES AND DISPOSAL CONSIDERATIONS:**SPILL RESPONSE PROCEDURES**

Use personal protection equipment and standard laboratory safety procedures for cleanup. Wipe up spill or absorb using a dry inert material and place waste in a suitable container. Clean spill area with soap and water.

WASTE DISPOSAL PROCEDURE

Dispose all waste in accordance with local, state, and federal regulations.

SECTION 7: HAZARDS IDENTIFICATION:**SYMPTOMS OF ACUTE OVEREXPOSURE****INHALATION**

Not an expected route of exposure.

CONTACT WITH EYES

May irritate eyes, with stinging, itching, watering, inflammation.

CONTACT WITH SKIN

May irritate skin, with stinging, itching, inflammation, drying.

INGESTION

May irritate gastrointestinal system, with nausea, vomiting, diarrhea.

SYMPTOMS AND HEALTH EFFECTS OF CHRONIC EXPOSURE**INHALATION**

Unknown.

EYE CONTACT

Unknown.

SKIN CONTACT

Unknown.

INGESTION

Unknown.

FIRST AID MEASURES:**EYE CONTACT**

Remove contact lenses if worn and flush eyes with copious amounts of water or buffered saline eye wash solution.
Get immediate medical attention.

SKIN CONTACT

Wash contact area thoroughly with mild soap and water.
Get medical attention if irritation develops.

INHALATION

Remove person to fresh air and treat symptomatically.
Get medical attention if symptoms worsen.

INGESTION

Get immediate medical attention.

SECTION 7: HAZARDS IDENTIFICATION, continued

CARCINOGENICITY

NTP

Not listed.

IARC

Not listed.

OSHA

Not listed.

CALIFORNIA PROPOSITION 65 WARNINGS

Not listed.

EPCRA SECTION 313 SUPPLIER NOTIFICATION

MEDICAL CONDITIONS AGGRAVATED BY PROLONGED EXPOSURE

Unknown.

SECTION 8: HANDLING INFORMATION / EXPOSURE CONTROLS

HMIS HAZARD CODES

HEALTH HAZARD

1 Minimal: Use standard safety procedures.

FIRE HAZARD

0 Non-Flammable: No significant risk of fire or explosion.

REACTIVITY

0 Non-Reactive: Will not react with water or most inert chemicals.

EQUIPMENT

A Use standard laboratory safety equipment.

VENTILATION

Local Dilution Exhaust

PERSONAL HYGIENE

Wash hands thoroughly with soap and water before eating or drinking.

NOTICE TO READER: American Master*Tech Scientific Inc. believes the information contained in this Material Safety Data Sheet (MSDS) is current as of the Revision Date, but can not guarantee that the information is all inclusive. Any chemical may pose unknown hazards; if this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. User is responsible for determining appropriate methods of personal protection, handling, use, storage, and disposal of this product. User assumes all liability for any incidental or consequential damage resulting from the use of this product.

A.M.T.S. MATERIAL SAFETY DATA SHEET

REVISED
4/28/2003

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

MSDS CODE **SSKC413**
TRADE NAME **10% FERRIC CHLORIDE**
PRODUCT DESCRIPTION
FROM RUSSELL-MOVAT PENTACHROME STAIN KIT

SUPPLIER: **AMERICAN MASTER*TECH SCIENTIFIC, INC.**
P.O. BOX 2539
LODI, CA 95241-2539
(209) 368-4031

IN CASE OF EMERGENCY CONTACT INFOTRAC: 800-535-5053 (24 HOURS)

SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS

<u>NAME</u>	<u>CAS #</u>	<u>OSHA PELTW</u>	<u>OSHA STEL</u>	<u>ACGIH TLV</u>	<u>ACGIH STEL</u>
WATER	7732-18-5	N/E	N/E	N/E	N/E
FERRIC CHLORIDE	10025-77-1	1 mg/M3	N/E	1 mg/M3	N/E

N/E = EXPOSURE LIMITS ARE NOT ESTABLISHED
C = THRESHOLD LEVEL VALUE, CEILING
PNOC = PARTICULATES NOT OTHERWISE CLASSIFIED

N/A = NOT AVAILABLE
ND = NUISANCE DUSTS
RD = RESPIRABLE DUSTS

A = ACTION LEVEL
S = SKIN CONTACT

SECTION 3: PHYSICAL AND CHEMICAL PROPERTIES**APPEARANCE / ODOR**

Brown opaque liquid; odorless.

SPECIFIC GRAVITY

1

SOLUBILITY IN WATER

Soluble

VAPOR DENSITY

N/A

VAPOR PRESSURE

N/A

EVAPORATION RATE

N/A

MELTING POINT

N/A

BOILING POINT

100° C

FLASH POINT

Aqueous Solution

AUTO-IGNITION TEMP

Aqueous Solution

LOWER EXPLOSIVE LIMIT IN AIR

Aqueous Solution

UPPER EXPLOSIVE LIMIT IN AIR

Aqueous Solution

SECTION 4: FIRE AND EXPLOSION INFORMATION**WATER SPRAY**

YES

CARBON DIOXIDE

YES

FOAM, ALCOHOL / CHEMICAL

CHEMICAL

DRY CHEMICAL

YES

OTHER

N/A

SPECIAL FIRE FIGHTING PROCEDURES

Wear appropriate personal protection equipment, including a self-contained breathing apparatus (S.C.B.A.).

UNUSUAL FIRE / EXPLOSION HAZARDS

May release toxic chlorides under fire conditions.

SECTION 5: REACTIVITY AND STABILITY DATA**STABILITY**

Stable

INCOMPATIBLE MATERIALS

Metals.

HAZARDOUS DECOMPOSITION PRODUCTS

Toxic chlorides.

HAZARDOUS POLYMERIZATION

Not reported.

HAZARDOUS POLYMERIZATION CONDITIONS TO AVOID

None known.

SECTION 6: ACCIDENTAL RELEASE MEASURES AND DISPOSAL CONSIDERATIONS:**SPILL RESPONSE PROCEDURES**

Use personal protection equipment and standard laboratory safety procedures for cleanup. Wipe up spill or absorb using a dry inert material and place waste in an appropriate container. Clean spill area with soap and water.

WASTE DISPOSAL PROCEDURE

Dispose all waste in accordance with local, state, and federal regulations.

SECTION 7: HAZARDS IDENTIFICATION:**SYMPTOMS OF ACUTE OVEREXPOSURE****INHALATION**

Not an expected route of exposure.

CONTACT WITH EYES

May irritate eyes, with itching, watering, inflammation.

CONTACT WITH SKIN

May irritate skin, with itching, inflammation, drying.

INGESTION

May cause gastrointestinal irritation, with nausea, vomiting, diarrhea.

SYMPTOMS AND HEALTH EFFECTS OF CHRONIC EXPOSURE**INHALATION**

Unknown.

EYE CONTACT

Unknown.

SKIN CONTACT

Unknown.

INGESTION

Unknown.

FIRST AID MEASURES:**EYE CONTACT**

Remove contact lenses if worn and flush eyes with copious amounts of water or buffered saline eye wash solution. Get immediate medical attention.

SKIN CONTACT

Remove contaminated clothing and wash contact area thoroughly with mild soap and plenty of water. Get medical attention if irritation develops.

INHALATION

Remove person to fresh air and treat symptomatically. Get medical attention if symptoms worsen.

INGESTION

Get immediate medical attention.

SECTION 7: HAZARDS IDENTIFICATION, continued

CARCINOGENICITY

NTP

Not listed.

IARC

Not listed.

OSHA

Not listed.

CALIFORNIA PROPOSITION 65 WARNINGS

Not listed.

EPCRA SECTION 313 SUPPLIER NOTIFICATION

MEDICAL CONDITIONS AGGRAVATED BY PROLONGED EXPOSURE

Unknown.

SECTION 8: HANDLING INFORMATION / EXPOSURE CONTROLS

HMIS HAZARD CODES

HEALTH HAZARD**2** Low: Avoid contact. High exposure may result in injury.FIRE HAZARD**0** Non-Flammable: No significant risk of fire or explosion.REACTIVITY**0** Non-Reactive: Will not react with water or most inert chemicals.EQUIPMENT**B** Wear chemical apron, gloves, and splash goggles in addition to all standard laboratory safety equipment.

VENTILATION

Local Dilution Exhaust

PERSONAL HYGIENE

Wash hands thoroughly with soap and water before eating or drinking.

NOTICE TO READER: American Master*Tech Scientific Inc. believes the information contained in this Material Safety Data Sheet (MSDS) is current as of the Revision Date, but can not guarantee that the information is all inclusive. Any chemical may pose unknown hazards; if this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. User is responsible for determining appropriate methods of personal protection, handling, use, storage, and disposal of this product. User assumes all liability for any incidental or consequential damage resulting from the use of this product.

A.M.T.S. MATERIAL SAFETY DATA SHEET

REVISED
4/28/2003

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

MSDS CODE **SSKC414**
TRADE NAME **2% FERRIC CHLORIDE**
PRODUCT DESCRIPTION
FROM RUSSELL-MOVAT PENTACHROME STAIN KIT

SUPPLIER: **AMERICAN MASTER*TECH SCIENTIFIC, INC.**
P.O. BOX 2539
LODI, CA 95241-2539
(209) 368-4031

IN CASE OF EMERGENCY CONTACT INFOTRAC: 800-535-5053 (24 HOURS)

SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS

<u>NAME</u>	<u>CAS #</u>	<u>OSHA PELTW</u>	<u>OSHA STEL</u>	<u>ACGIH TLV</u>	<u>ACGIH STEL</u>
WATER	7732-18-5	N/E	N/E	N/E	N/E
FERRIC CHLORIDE	10025-77-1	1 mg/M3	N/E	1 mg/M3	N/E

N/E = EXPOSURE LIMITS ARE NOT ESTABLISHED
C = THRESHOLD LEVEL VALUE, CEILING
PNO = PARTICULATES NOT OTHERWISE CLASSIFIED

N/A = NOT AVAILABLE
ND = NUISANCE DUSTS
RD = RESPIRABLE DUSTS

A = ACTION LEVEL
S = SKIN CONTACT

SECTION 3: PHYSICAL AND CHEMICAL PROPERTIES**APPEARANCE / ODOR**

Brown opaque liquid; odorless.

SPECIFIC GRAVITY

1

SOLUBILITY IN WATER

Soluble

VAPOR DENSITY

N/A

VAPOR PRESSURE

N/A

EVAPORATION RATE

N/A

MELTING POINT

N/A

BOILING POINT

100° C

FLASH POINT

Aqueous Solution

AUTO-IGNITION TEMP

Aqueous Solution

LOWER EXPLOSIVE LIMIT IN AIR

Aqueous Solution

UPPER EXPLOSIVE LIMIT IN AIR

Aqueous Solution

SECTION 4: FIRE AND EXPLOSION INFORMATION**WATER SPRAY**

YES

CARBON DIOXIDE

YES

FOAM, ALCOHOL / CHEMICAL

CHEMICAL

DRY CHEMICAL

YES

OTHER

N/A

SPECIAL FIRE FIGHTING PROCEDURES

Wear appropriate personal protection equipment, including a self-contained breathing apparatus (S.C.B.A.).

UNUSUAL FIRE / EXPLOSION HAZARDS

May release toxic chlorides under fire conditions.

SECTION 5: REACTIVITY AND STABILITY DATA**STABILITY**

Stable

INCOMPATIBLE MATERIALS

Metals.

HAZARDOUS DECOMPOSITION PRODUCTS

Toxic chlorides.

HAZARDOUS POLYMERIZATION

Not reported.

HAZARDOUS POLYMERIZATION CONDITIONS TO AVOID

None known.

SECTION 6: ACCIDENTAL RELEASE MEASURES AND DISPOSAL CONSIDERATIONS:**SPILL RESPONSE PROCEDURES**

Use personal protection equipment and standard laboratory safety procedures for cleanup. Wipe up spill or absorb using a dry inert material and place waste in an appropriate container. Clean spill area with soap and water.

WASTE DISPOSAL PROCEDURE

Dispose all waste in accordance with local, state, and federal regulations.

SECTION 7: HAZARDS IDENTIFICATION:**SYMPTOMS OF ACUTE OVEREXPOSURE****INHALATION**

Not an expected route of exposure.

CONTACT WITH EYES

May irritate eyes, with itching, watering, inflammation.

CONTACT WITH SKIN

May irritate skin, with itching, inflammation, drying.

INGESTION

May cause gastrointestinal irritation, with nausea, vomiting, diarrhea.

SYMPTOMS AND HEALTH EFFECTS OF CHRONIC EXPOSURE**INHALATION**

Unknown.

EYE CONTACT

Unknown.

SKIN CONTACT

Unknown.

INGESTION

Unknown.

FIRST AID MEASURES:**EYE CONTACT**

Remove contact lenses if worn and flush eyes with copious amounts of water or buffered saline eye wash solution. Get immediate medical attention.

SKIN CONTACT

Remove contaminated clothing and wash contact area thoroughly with mild soap and plenty of water. Get medical attention if irritation develops.

INHALATION

Remove person to fresh air and treat symptomatically. Get medical attention if symptoms worsen.

INGESTION

Get immediate medical attention.

SECTION 7: HAZARDS IDENTIFICATION, continued**CARCINOGENICITY****NTP**

Not listed.

IARC

Not listed.

OSHA

Not listed.

CALIFORNIA PROPOSITION 65 WARNINGS

Not listed.

EPCRA SECTION 313 SUPPLIER NOTIFICATION**MEDICAL CONDITIONS AGGRAVATED BY PROLONGED EXPOSURE**

Unknown.

SECTION 8: HANDLING INFORMATION / EXPOSURE CONTROLS**HMIS HAZARD CODES****HEALTH HAZARD****2** Low: Avoid contact. High exposure may result in injury.**FIRE HAZARD****0** Non-Flammable: No significant risk of fire or explosion.**REACTIVITY****0** Non-Reactive: Will not react with water or most inert chemicals.**EQUIPMENT****B** Wear chemical apron, gloves, and splash goggles in addition to all standard laboratory safety equipment.**VENTILATION**

Local Dilution Exhaust

PERSONAL HYGIENE

Wash hands thoroughly with soap and water before eating or drinking.

NOTICE TO READER: American Master*Tech Scientific Inc. believes the information contained in this Material Safety Data Sheet (MSDS) is current as of the Revision Date, but can not guarantee that the information is all inclusive. Any chemical may pose unknown hazards; if this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. User is responsible for determining appropriate methods of personal protection, handling, use, storage, and disposal of this product. User assumes all liability for any incidental or consequential damage resulting from the use of this product.

A.M.T.S. MATERIAL SAFETY DATA SHEET

REVISED
4/28/2003

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

MSDS CODE **SSKC416**
TRADE NAME **3% GLACIAL ACETIC ACID**
PRODUCT DESCRIPTION
FROM RUSSELL-MOVAT PENTACHROME STAIN KIT

SUPPLIER: **AMERICAN MASTER*TECH SCIENTIFIC, INC.**
P.O. BOX 2539
LODI, CA 95241-2539
(209) 368-4031

IN CASE OF EMERGENCY CONTACT INFOTRAC: 800-535-5053 (24 HOURS)

SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS

<u>NAME</u>	<u>CAS #</u>	<u>OSHA PELTW</u>	<u>OSHA STEL</u>	<u>ACGIH TLV</u>	<u>ACGIH STEL</u>
WATER	7732-18-5	N/E	N/E	N/E	N/E
ACETIC ACID	64-19-7	10 PPM	N/E	10 PPM	15 PPM

N/E = EXPOSURE LIMITS ARE NOT ESTABLISHED
C = THRESHOLD LEVEL VALUE, CEILING
PNO = PARTICULATES NOT OTHERWISE CLASSIFIED

N/A = NOT AVAILABLE
ND = NUISANCE DUSTS
RD = RESPIRABLE DUSTS

A = ACTION LEVEL
S = SKIN CONTACT

SECTION 3: PHYSICAL AND CHEMICAL PROPERTIES**APPEARANCE / ODOR**

Colorless, transparent liquid; mild acetic acid odor.

SPECIFIC GRAVITY

1

SOLUBILITY IN WATER

Soluble

VAPOR DENSITY

N/A

VAPOR PRESSURE

N/A

EVAPORATION RATE

N/A

MELTING POINT

N/A

BOILING POINT

100° C

FLASH POINT

Aqueous Solution

AUTO-IGNITION TEMP

Aqueous Solution

LOWER EXPLOSIVE LIMIT IN AIR

Aqueous Solution

UPPER EXPLOSIVE LIMIT IN AIR

Aqueous Solution

SECTION 4: FIRE AND EXPLOSION INFORMATION**WATER SPRAY**

YES

CARBON DIOXIDE

YES

FOAM, ALCOHOL / CHEMICAL

CHEMICAL

DRY CHEMICAL

YES

OTHER

N/A

SPECIAL FIRE FIGHTING PROCEDURES

Wear appropriate personal protection equipment, including a self-contained breathing apparatus (S.C.B.A.).

UNUSUAL FIRE / EXPLOSION HAZARDS

Produces acetic acid vapors under fire conditions, which may form explosive mixtures with air.

SECTION 5: REACTIVITY AND STABILITY DATA**STABILITY**

Stable

INCOMPATIBLE MATERIALS

Reactive with oxidizers, reducing agents, metals, acids, alkalis.

HAZARDOUS DECOMPOSITION PRODUCTS

Oxides of carbon.

HAZARDOUS POLYMERIZATION

Not reported.

HAZARDOUS POLYMERIZATION CONDITIONS TO AVOID

None known.

SECTION 6: ACCIDENTAL RELEASE MEASURES AND DISPOSAL CONSIDERATIONS:**SPILL RESPONSE PROCEDURES**

Use personal protection equipment and standard laboratory safety procedures for cleanup. Wipe up spill or absorb using a dry inert material and place waste in an appropriate container. Clean spill area with soap and water.

WASTE DISPOSAL PROCEDURE

Dispose all waste in accordance with local, state, and federal regulations.

SECTION 7: HAZARDS IDENTIFICATION:**SYMPTOMS OF ACUTE OVEREXPOSURE****INHALATION**

May irritate nose and throat, with stinging, burning, coughing.

CONTACT WITH EYES

May irritate eyes, with stinging, watering, inflammation; may cause chemical burns to eyes and surrounding tissue.

CONTACT WITH SKIN

May irritate skin, with stinging, drying, inflammation, drying.

INGESTION

May irritate gastrointestinal system.

SYMPTOMS AND HEALTH EFFECTS OF CHRONIC EXPOSURE**INHALATION**

Prolonged exposure may cause chemical burns of the respiratory tract.

EYE CONTACT

Prolonged exposure will result in blindness.

SKIN CONTACT

May cause dermatitis.

INGESTION

Unknown.

FIRST AID MEASURES:**EYE CONTACT**

Remove contact lenses if worn and flush eyes with copious amounts of water or buffered saline eye wash solution. Get immediate medical attention.

SKIN CONTACT

Remove contaminated clothing and wash contact area with mild soap and plenty of water. Get medical attention if irritation develops.

INHALATION

Remove person to fresh air and treat symptomatically. Get medical attention if symptoms worsen.

INGESTION

Get immediate medical attention.

SECTION 7: HAZARDS IDENTIFICATION, continued

CARCINOGENICITY

NTP

Not listed.

IARC

Not listed.

OSHA

Not listed.

CALIFORNIA PROPOSITION 65 WARNINGS

Not listed.

EPCRA SECTION 313 SUPPLIER NOTIFICATION

MEDICAL CONDITIONS AGGRAVATED BY PROLONGED EXPOSURE

Unknown.

SECTION 8: HANDLING INFORMATION / EXPOSURE CONTROLS

HMIS HAZARD CODES

HEALTH HAZARD

1 Minimal: Use standard safety procedures.

FIRE HAZARD

0 Non-Flammable: No significant risk of fire or explosion.

REACTIVITY

0 Non-Reactive: Will not react with water or most inert chemicals.

EQUIPMENT

B Wear chemical apron, gloves, and splash goggles in addition to all standard laboratory safety equipment.

VENTILATION

Local Dilution Exhaust

PERSONAL HYGIENE

Wash hands thoroughly with soap and water before eating or drinking.

NOTICE TO READER: American Master*Tech Scientific Inc. believes the information contained in this Material Safety Data Sheet (MSDS) is current as of the Revision Date, but can not guarantee that the information is all inclusive. Any chemical may pose unknown hazards; if this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. User is responsible for determining appropriate methods of personal protection, handling, use, storage, and disposal of this product. User assumes all liability for any incidental or consequential damage resulting from the use of this product.

A.M.T.S. MATERIAL SAFETY DATA SHEET

REVISED
4/28/2003

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

MSDS CODE **SSKC418**
TRADE NAME **1% GLACIAL ACETIC ACID**
PRODUCT DESCRIPTION
FROM RUSSELL-MOVAT PENTACHROME STAIN KIT

SUPPLIER: **AMERICAN MASTER*TECH SCIENTIFIC, INC.**
P.O. BOX 2539
LODI, CA 95241-2539
(209) 368-4031

IN CASE OF EMERGENCY CONTACT INFOTRAC: 800-535-5053 (24 HOURS)

SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS

<u>NAME</u>	<u>CAS #</u>	<u>OSHA PELTW</u>	<u>OSHA STEL</u>	<u>ACGIH TLV</u>	<u>ACGIH STEL</u>
WATER	7732-18-5	N/E	N/E	N/E	N/E
ACETIC ACID	64-19-7	10 PPM	N/E	10 PPM	15 PPM

N/E = EXPOSURE LIMITS ARE NOT ESTABLISHED
C = THRESHOLD LEVEL VALUE, CEILING
PNOC = PARTICULATES NOT OTHERWISE CLASSIFIED

N/A = NOT AVAILABLE
ND = NUISANCE DUSTS
RD = RESPIRABLE DUSTS

A = ACTION LEVEL
S = SKIN CONTACT

SECTION 3: PHYSICAL AND CHEMICAL PROPERTIES**APPEARANCE / ODOR**

Colorless, transparent liquid; mild acetic acid odor.

SPECIFIC GRAVITY

1

SOLUBILITY IN WATER

Soluble

VAPOR DENSITY

N/A

VAPOR PRESSURE

N/A

EVAPORATION RATE

N/A

MELTING POINT

N/A

BOILING POINT

100° C

FLASH POINT

Aqueous Solution

AUTO-IGNITION TEMP

Aqueous Solution

LOWER EXPLOSIVE LIMIT IN AIR

Aqueous Solution

UPPER EXPLOSIVE LIMIT IN AIR

Aqueous Solution

SECTION 4: FIRE AND EXPLOSION INFORMATION**WATER SPRAY**

YES

CARBON DIOXIDE

YES

FOAM, ALCOHOL / CHEMICAL

CHEMICAL

DRY CHEMICAL

YES

OTHER

N/A

SPECIAL FIRE FIGHTING PROCEDURES

Wear appropriate personal protection equipment, including a self-contained breathing apparatus (S.C.B.A.).

UNUSUAL FIRE / EXPLOSION HAZARDS

Produces acetic acid vapors under fire conditions, which may form explosive mixtures with air.

SECTION 5: REACTIVITY AND STABILITY DATA**STABILITY**

Stable

INCOMPATIBLE MATERIALS

Reactive with oxidizers, reducing agents, metals, acids, alkalis.

HAZARDOUS DECOMPOSITION PRODUCTS

Oxides of carbon.

HAZARDOUS POLYMERIZATION

Not reported.

HAZARDOUS POLYMERIZATION CONDITIONS TO AVOID

None known.

SECTION 6: ACCIDENTAL RELEASE MEASURES AND DISPOSAL CONSIDERATIONS:**SPILL RESPONSE PROCEDURES**

Use personal protection equipment and standard laboratory safety procedures for cleanup. Wipe up spill or absorb using a dry inert material and place waste in an appropriate container. Clean spill area with soap and water.

WASTE DISPOSAL PROCEDURE

Dispose all waste in accordance with local, state, and federal regulations.

SECTION 7: HAZARDS IDENTIFICATION:**SYMPTOMS OF ACUTE OVEREXPOSURE****INHALATION**

May irritate nose and throat, with stinging, burning, coughing.

CONTACT WITH EYES

May irritate eyes, with stinging, watering, inflammation; may cause chemical burns to eyes and surrounding tissue.

CONTACT WITH SKIN

May irritate skin, with stinging, drying, inflammation, drying.

INGESTION

May irritate gastrointestinal system.

SYMPTOMS AND HEALTH EFFECTS OF CHRONIC EXPOSURE**INHALATION**

Prolonged exposure may cause chemical burns of the respiratory tract.

EYE CONTACT

Prolonged exposure will result in blindness.

SKIN CONTACT

May cause dermatitis.

INGESTION

Unknown.

FIRST AID MEASURES:**EYE CONTACT**

Remove contact lenses if worn and flush eyes with copious amounts of water or buffered saline eye wash solution. Get immediate medical attention.

SKIN CONTACT

Remove contaminated clothing and wash contact area with mild soap and plenty of water. Get medical attention if irritation develops.

INHALATION

Remove person to fresh air and treat symptomatically. Get medical attention if symptoms worsen.

INGESTION

Get immediate medical attention.

SECTION 7: HAZARDS IDENTIFICATION, continued**CARCINOGENICITY****NTP**

Not listed.

IARC

Not listed.

OSHA

Not listed.

CALIFORNIA PROPOSITION 65 WARNINGS

Not listed.

EPCRA SECTION 313 SUPPLIER NOTIFICATION**MEDICAL CONDITIONS AGGRAVATED BY PROLONGED EXPOSURE**

Unknown.

SECTION 8: HANDLING INFORMATION / EXPOSURE CONTROLS**HMIS HAZARD CODES****HEALTH HAZARD****1** Minimal: Use standard safety procedures.**FIRE HAZARD****0** Non-Flammable: No significant risk of fire or explosion.**REACTIVITY****0** Non-Reactive: Will not react with water or most inert chemicals.**EQUIPMENT****B** Wear chemical apron, gloves, and splash goggles in addition to all standard laboratory safety equipment.**VENTILATION**

Local Dilution Exhaust

PERSONAL HYGIENE

Wash hands thoroughly with soap and water before eating or drinking.

NOTICE TO READER: American Master*Tech Scientific Inc. believes the information contained in this Material Safety Data Sheet (MSDS) is current as of the Revision Date, but can not guarantee that the information is all inclusive. Any chemical may pose unknown hazards; if this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. User is responsible for determining appropriate methods of personal protection, handling, use, storage, and disposal of this product. User assumes all liability for any incidental or consequential damage resulting from the use of this product.

A.M.T.S. MATERIAL SAFETY DATA SHEET

REVISED
4/28/2003

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

MSDS CODE **SSKC419**
TRADE NAME **5% PHOSPHOTUNGSTIC ACID**
PRODUCT DESCRIPTION **FROM RUSSELL-MOVAT PENTACHROME STAIN KIT**

SUPPLIER: **AMERICAN MASTER*TECH SCIENTIFIC, INC.**
P.O. BOX 2539
LODI, CA 95241-2539
(209) 368-4031

IN CASE OF EMERGENCY CONTACT INFOTRAC: 800-535-5053 (24 HOURS)

SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS

<u>NAME</u>	<u>CAS #</u>	<u>OSHA PELTW</u>	<u>OSHA STEL</u>	<u>ACGIH TLV</u>	<u>ACGIH STEL</u>
WATER	7732-18-5	N/E	N/E	N/E	N/E
PHOSPHOTUNGSTIC ACID	12501-23-4	1 mg / M3	N/E	N/E	N/E

N/E = EXPOSURE LIMITS ARE NOT ESTABLISHED
C = THRESHOLD LEVEL VALUE, CEILING
PNO = PARTICULATES NOT OTHERWISE CLASSIFIED

N/A = NOT AVAILABLE
ND = NUISANCE DUSTS
RD = RESPIRABLE DUSTS

A = ACTION LEVEL
S = SKIN CONTACT

SECTION 3: PHYSICAL AND CHEMICAL PROPERTIES**APPEARANCE / ODOR**

Colorless transparent liquid; odorless.

SPECIFIC GRAVITY

1

SOLUBILITY IN WATER

Soluble

VAPOR DENSITY

N/A

VAPOR PRESSURE

N/A

EVAPORATION RATE

N/A

MELTING POINT

N/A

BOILING POINT

100° C

FLASH POINT

Aqueous Solution

AUTO-IGNITION TEMP

Aqueous Solution

LOWER EXPLOSIVE LIMIT IN AIR

Aqueous Solution

UPPER EXPLOSIVE LIMIT IN AIR

Aqueous Solution

SECTION 4: FIRE AND EXPLOSION INFORMATION**WATER SPRAY**

YES

CARBON DIOXIDE

YES

FOAM, ALCOHOL / CHEMICAL

CHEMICAL

DRY CHEMICAL

YES

OTHER

N/A

SPECIAL FIRE FIGHTING PROCEDURES

Wear appropriate personal protection equipment, including a self-contained breathing apparatus (S.C.B.A.).

UNUSUAL FIRE / EXPLOSION HAZARDS

May produce metallic oxides under fire conditions.

SECTION 5: REACTIVITY AND STABILITY DATA**STABILITY**

Stable

INCOMPATIBLE MATERIALS

Strong oxidizers, metals.

HAZARDOUS DECOMPOSITION PRODUCTS

Oxides of phosphorous.

HAZARDOUS POLYMERIZATION

Not reported.

HAZARDOUS POLYMERIZATION CONDITIONS TO AVOID

None known.

SECTION 6: ACCIDENTAL RELEASE MEASURES AND DISPOSAL CONSIDERATIONS:**SPILL RESPONSE PROCEDURES**

Use personal protection equipment and standard laboratory safety procedures for cleanup. Wipe up spill or absorb with a dry inert material and place waste in a suitable container. Clean spill area with soap and water.

WASTE DISPOSAL PROCEDURE

Dispose all waste in accordance with local, state, and federal regulations.

SECTION 7: HAZARDS IDENTIFICATION:**SYMPTOMS OF ACUTE OVEREXPOSURE****INHALATION**

Not an expected route of exposure.

CONTACT WITH EYES

May irritate eyes, with stinging, watering, inflammation.

CONTACT WITH SKIN

May irritate skin, with itching, drying, inflammation.

INGESTION

May irritate gastrointestinal system, with nausea, vomiting, diarrhea.

SYMPTOMS AND HEALTH EFFECTS OF CHRONIC EXPOSURE**INHALATION**

Unknown.

EYE CONTACT

Unknown.

SKIN CONTACT

Unknown.

INGESTION

Unknown.

FIRST AID MEASURES:**EYE CONTACT**

Remove contact lenses if worn and flush eyes with copious amounts of water or buffered saline eye wash solution. Get immediate medical attention.

SKIN CONTACT

Remove contaminated clothing and wash contact area thoroughly with mild soap and water. Get medical attention if irritation develops.

INHALATION

Remove person to fresh air and treat symptomatically. Get medical attention if symptoms worsen.

INGESTION

Get immediate medical attention.

SECTION 7: HAZARDS IDENTIFICATION, continued**CARCINOGENICITY****NTP**

Not listed.

IARC

Not listed.

OSHA

Not listed.

CALIFORNIA PROPOSITION 65 WARNINGS

Not listed.

EPCRA SECTION 313 SUPPLIER NOTIFICATION**MEDICAL CONDITIONS AGGRAVATED BY PROLONGED EXPOSURE**

Repeated skin exposure can produce localized skin damage or dermatitis.

SECTION 8: HANDLING INFORMATION / EXPOSURE CONTROLS**HMIS HAZARD CODES****HEALTH HAZARD****1** Minimal: Use standard safety procedures.**FIRE HAZARD****0** Non-Flammable: No significant risk of fire or explosion.**REACTIVITY****0** Non-Reactive: Will not react with water or most inert chemicals.**EQUIPMENT****B** Wear chemical apron, gloves, and splash goggles in addition to all standard laboratory safety equipment.**VENTILATION**

Local Dilution Exhaust

PERSONAL HYGIENE

Wash hands thoroughly with soap and water before eating or drinking.

NOTICE TO READER: American Master*Tech Scientific Inc. believes the information contained in this Material Safety Data Sheet (MSDS) is current as of the Revision Date, but can not guarantee that the information is all inclusive. Any chemical may pose unknown hazards; if this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. User is responsible for determining appropriate methods of personal protection, handling, use, storage, and disposal of this product. User assumes all liability for any incidental or consequential damage resulting from the use of this product.

A.M.T.S. MATERIAL SAFETY DATA SHEET

REVISED
4/28/2003

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

MSDS CODE **SSKC415**
TRADE NAME **5% SODIUM THIOSULFATE**
PRODUCT DESCRIPTION **FROM RUSSELL-MOVAT PENTACHROME STAIN KIT**

SUPPLIER: **AMERICAN MASTER*TECH SCIENTIFIC, INC.**
P.O. BOX 2539
LODI, CA 95241-2539
(209) 368-4031

IN CASE OF EMERGENCY CONTACT INFOTRAC: 800-535-5053 (24 HOURS)

SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS

<u>NAME</u>	<u>CAS #</u>	<u>OSHA PELTW</u>	<u>OSHA STEL</u>	<u>ACGIH TLV</u>	<u>ACGIH STEL</u>
WATER	7732-18-5	N/E	N/E	N/E	N/E
SODIUM THIOSULFATE, ANHYDROUS	7772-98-7	N/E	N/E	N/E	N/E
THYMOL	89-83-8	N/E	N/E	N/E	N/E

N/E = EXPOSURE LIMITS ARE NOT ESTABLISHED
C = THRESHOLD LEVEL VALUE, CEILING
PNOC = PARTICULATES NOT OTHERWISE CLASSIFIED

N/A = NOT AVAILABLE
ND = NUISANCE DUSTS
RD = RESPIRABLE DUSTS

A = ACTION LEVEL
S = SKIN CONTACT

SECTION 3: PHYSICAL AND CHEMICAL PROPERTIES**APPEARANCE / ODOR**

Colorless transparent liquid; characteristic odor.

SPECIFIC GRAVITY

1

SOLUBILITY IN WATER

Soluble

VAPOR DENSITY

N/A

VAPOR PRESSURE

N/A

EVAPORATION RATE

N/A

MELTING POINT

N/A

BOILING POINT

100° C

FLASH POINT

Aqueous Solution

AUTO-IGNITION TEMP

Aqueous Solution

LOWER EXPLOSIVE LIMIT IN AIR

Aqueous Solution

UPPER EXPLOSIVE LIMIT IN AIR

Aqueous Solution

SECTION 4: FIRE AND EXPLOSION INFORMATION**WATER SPRAY**

YES

CARBON DIOXIDE

YES

FOAM, ALCOHOL / CHEMICAL

CHEMICAL

DRY CHEMICAL

YES

OTHER

N/A

SPECIAL FIRE FIGHTING PROCEDURES

Wear appropriate personal protection equipment, including a self-contained breathing apparatus (S.C.B.A.).

UNUSUAL FIRE / EXPLOSION HAZARDS

None expected.

SECTION 5: REACTIVITY AND STABILITY DATA**STABILITY**

Stable

INCOMPATIBLE MATERIALS

Not available.

HAZARDOUS DECOMPOSITION PRODUCTS

Carbon oxides.

HAZARDOUS POLYMERIZATION

Not reported.

HAZARDOUS POLYMERIZATION CONDITIONS TO AVOID

None known.

SECTION 6: ACCIDENTAL RELEASE MEASURES AND DISPOSAL CONSIDERATIONS:**SPILL RESPONSE PROCEDURES**

Use personal protection equipment and standard laboratory safety procedures for cleanup. Wipe up spill or absorb using a dry inert material and place waste in an appropriate container. Clean spill area with soap and water.

WASTE DISPOSAL PROCEDURE

Dispose all waste in accordance with local, state, and federal regulations.

SECTION 7: HAZARDS IDENTIFICATION:**SYMPTOMS OF ACUTE OVEREXPOSURE****INHALATION**

Not an expected route of exposure.

CONTACT WITH EYES

Unknown.

CONTACT WITH SKIN

Unknown.

INGESTION

Unknown.

SYMPTOMS AND HEALTH EFFECTS OF CHRONIC EXPOSURE**INHALATION**

Unknown.

EYE CONTACT

Unknown.

SKIN CONTACT

Unknown.

INGESTION

Unknown.

FIRST AID MEASURES:**EYE CONTACT**

Remove contact lenses if worn and flush eyes with copious amounts of water or buffered saline eye wash solution. Get immediate medical attention.

SKIN CONTACT

Remove contaminated clothing and wash contact area thoroughly with mild soap and plenty of water. Get medical attention if irritation develops.

INHALATION

Remove person to fresh air and treat symptomatically. Get medical attention if symptoms worsen.

INGESTION

Get immediate medical attention.

SECTION 7: HAZARDS IDENTIFICATION, continued**CARCINOGENICITY****NTP**

Not listed.

IARC

Not listed.

OSHA

Not listed.

CALIFORNIA PROPOSITION 65 WARNINGS

Not listed.

EPCRA SECTION 313 SUPPLIER NOTIFICATION**MEDICAL CONDITIONS AGGRAVATED BY PROLONGED EXPOSURE**

Unknown.

SECTION 8: HANDLING INFORMATION / EXPOSURE CONTROLS**HMIS HAZARD CODES****HEALTH HAZARD****1** Minimal: Use standard safety procedures.**FIRE HAZARD****0** Non-Flammable: No significant risk of fire or explosion.**REACTIVITY****0** Non-Reactive: Will not react with water or most inert chemicals.**EQUIPMENT****A** Use standard laboratory safety equipment.**VENTILATION**

Local Dilution Exhaust

PERSONAL HYGIENE

Wash hands thoroughly with soap and water before eating or drinking.

NOTICE TO READER: American Master*Tech Scientific Inc. believes the information contained in this Material Safety Data Sheet (MSDS) is current as of the Revision Date, but can not guarantee that the information is all inclusive. Any chemical may pose unknown hazards; if this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. User is responsible for determining appropriate methods of personal protection, handling, use, storage, and disposal of this product. User assumes all liability for any incidental or consequential damage resulting from the use of this product.

A.M.T.S. MATERIAL SAFETY DATA SHEET

REVISED
2/3/2003

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

MSDS CODE
SSSTUIO

TRADE NAME
UNIVERSAL IODINE SOLUTION

PRODUCT DESCRIPTION
Histology Stain

**SUPPLIER: AMERICAN MASTER*TECH SCIENTIFIC, INC.
P.O. BOX 2539
LODI, CA 95241-2539
(209) 368-4031**

IN CASE OF EMERGENCY CONTACT INFOTRAC: 800-535-5053 (24 HOURS)

SECTION 2: COMPOSITION AND INFORMATION ON INGREDIENTS

<u>NAME</u>	<u>CAS #</u>	<u>OSHA PELTW</u>	<u>OSHA STEL</u>	<u>ACGIH TLV</u>	<u>ACGIH STEL</u>
WATER	7732-18-5	N/E	N/E	N/E	N/E
POTASSIUM IODIDE	7681-11-0	N/E	N/E	N/E	N/E
IODINE	7553-56-2	1 mg/M3	N/E	0.1 PPM	N/E

N/E = EXPOSURE LIMITS ARE NOT ESTABLISHED
C = THRESHOLD LEVEL VALUE, CEILING
PNOC = PARTICULATES NOT OTHERWISE CLASSIFIED

N/A = NOT AVAILABLE
ND = NUISANCE DUSTS
RD = RESPIRABLE DUSTS

A = ACTION LEVEL
S = SKIN CONTACT

SECTION 3: PHYSICAL AND CHEMICAL PROPERTIES**APPEARANCE / ODOR**

Brown to black opaque liquid; iodine odor.

SPECIFIC GRAVITY

1

SOLUBILITY IN WATER

Soluble

VAPOR DENSITY

N/A

VAPOR PRESSURE

N/A

EVAPORATION RATE

N/A

MELTING POINT

N/A

BOILING POINT

100° C

FLASH POINT

Aqueous Solution

AUTO-IGNITION TEMP

Aqueous Solution

LOWER EXPLOSIVE LIMIT IN AIR

Aqueous Solution

UPPER EXPLOSIVE LIMIT IN AIR

Aqueous Solution

SECTION 4: FIRE AND EXPLOSION INFORMATION**WATER SPRAY**

YES

CARBON DIOXIDE

YES

FOAM, ALCOHOL / CHEMICAL

CHEMICAL

DRY CHEMICAL

YES

OTHER

N/A

SPECIAL FIRE FIGHTING PROCEDURES

Wear personal protection equipment, including a self-contained breathing apparatus (S.C.B.A.).

UNUSUAL FIRE / EXPLOSION HAZARDS

May release toxic fumes under fire conditions.

SECTION 5: REACTIVITY AND STABILITY DATA**STABILITY**

Stable

INCOMPATIBLE MATERIALS

Reactive with combustible materials, organic materials, metals.

HAZARDOUS DECOMPOSITION PRODUCTS

Toxic chlorides and iodides.

HAZARDOUS POLYMERIZATION

Will not occur.

HAZARDOUS POLYMERIZATION CONDITIONS TO AVOID

None reported.

SECTION 6: ACCIDENTAL RELEASE MEASURES AND DISPOSAL CONSIDERATIONS:**SPILL RESPONSE PROCEDURES**

Use personal protection equipment and standard laboratory safety procedures for cleanup. Wipe up or absorb spill using a non-reactive material and place waste in an appropriate waste container. Clean spill area with soap and water.

WASTE DISPOSAL PROCEDURE

Dispose all waste in accordance with local, state, and federal regulations.

SECTION 7: HAZARDS IDENTIFICATION:**SYMPTOMS OF ACUTE OVEREXPOSURE****INHALATION**

Not an expected route of exposure.

CONTACT WITH EYES

May cause irritation, with redness, watering, and itching.

CONTACT WITH SKIN

May irritate skin, with itching or redness.

INGESTION

May be hazardous if ingested.

SYMPTOMS AND HEALTH EFFECTS OF CHRONIC EXPOSURE**INHALATION**

Unknown.

EYE CONTACT

Unknown.

SKIN CONTACT

May cause dermatitis.

INGESTION

Unknown

FIRST AID MEASURES:**EYE CONTACT**

Remove contact lenses if worn and flush eyes with copious amounts of water or buffered saline eye wash solution. Get immediate medical attention.

SKIN CONTACT

Remove contaminated clothing and wash contact area thoroughly with mild soap and plenty of water. Get medical attention if irritation develops.

INHALATION

Remove person to fresh air and treat symptomatically. Get medical attention if symptoms worsen.

INGESTION

Get immediate medical attention.

SECTION 7: HAZARDS IDENTIFICATION, continued

CARCINOGENICITY

NTP
Not listed.

IARC
Not listed.

OSHA
Not listed.

CALIFORNIA PROPOSITION 65 WARNINGS
Not listed.

EPCRA SECTION 313 SUPPLIER NOTIFICATION

MEDICAL CONDITIONS AGGRAVATED BY PROLONGED EXPOSURE
Unknown.

SECTION 8: HANDLING INFORMATION / EXPOSURE CONTROLS

HMIS HAZARD CODES

HEALTH HAZARD

1 Minimal: Use standard safety procedures.

FIRE HAZARD

0 Non-Flammable: No significant risk of fire or explosion.

REACTIVITY

0 Non-Reactive: Will not react with water or most inert chemicals.

EQUIPMENT

B Wear chemical apron, gloves, and splash goggles in addition to all standard laboratory safety equipment.

VENTILATION
Local Dilution Exhaust

PERSONAL HYGIENE
Wash hands thoroughly with soap and water before eating or drinking.

NOTICE TO READER: American Master*Tech Scientific Inc. believes the information contained in this Material Safety Data Sheet (MSDS) is current as of the Revision Date, but can not guarantee that the information is all inclusive. Any chemical may pose unknown hazards; if this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. User is responsible for determining appropriate methods of personal protection, handling, use, storage, and disposal of this product. User assumes all liability for any incidental or consequential damage resulting from the use of this product.