

SECTION I

MANUFACTURER'S NAME
LAMOTTE CHEMICAL PRODUCTS COMPANY
ADDRESS
P.O. BOX 329, CHESTERTOWN, MD 21620
CHEMICAL NAME AND SYNONYMS

EMERGENCY TELEPHONE NO.301-77
301-778-3100

TRADE NAME AND SYNONYMS (CODE 4241)
AMMONIA NITROGEN #2 5103, 5184, 4798

FORMULA

CAS #7783-33-7 4798, 4050, 5122, 6374

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS %	TLV	ALLOYS AND METALLIC COATINGS
PIGMENTS	BASE METAL	
CATALYST	ALLOYS	
VEHICLE	N/A	METALLIC COATINGS
SOLVENTS		PLUS COATING OR CORE FLUX
ADDITIVES		OTHERS
OTHERS		

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS OR GASES	%	TLV (UNITS)
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POTASSIUM HYDROXIDE	CAS #1310-58-3	15
POTASSIUM IODIDE	CAS #7681-11-0	6.25
MERCURIC CALORIDE	CAS #7487-94-7	3.3

SECTION III - PHYSICAL DATA

BOILING POINT (.F.)	UNKNOWN	SPECIFIC GRAVITY (H2O=1)	UNKNOWN
VAPOR PRESSURE (MM HG.)	UNKNOWN	PERCENT, VOLATILE BY VOLUME (%)	UNKNOWN
VAPOR DENSITY (AIR=1)	UNKNOWN	EVAPORATTON RATE	UNKNOWN
SOLUBILITY IN WATER	SOLUBLE		
APPEARANCE AND ODOR	CLEAR, LIGHT YELLOW LIQUID; SLIGHT SLIPPERY FEELING		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED)	FLAMMABLE LIMITS	LEL	UE
EXTTNGUISHING MEDIA			
SPECIAL FIRE FIGHTING PROCEDURES	NO FIRE HAZARD		
UNUSUAL FIRE AND EXPLOSION HAZARDS			

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE UNKNOWN POISON
EFFECTS OF OVEREXPOSURE CAUSES SEVERE BURNS, MAY BE FATAL IF SWALLOWED.
EMERGENCY AND FIRST AID PROCEDURES
EYE CONTACT - FLUSH THOROUGHLY WITH WATER FOR 15 MIN., GET MEDICAL ATTENTION.
EXTERNAL - FLUSH WITH WATER; REMOVE AFFECTED CLOTHING AND FLUSH SKIN THOROUGHLY FOR 15 MIN.
INTERNAL-DO NOT INDUCE VOMITING RINSE MOUTH WITH WATER DRINK GLASSFUL OF WATER CALL A PHYSICIAN IMMEDIATELY.

SECTION VI - REACTIVITY DATA

STABILITY UNSTABLE	CONDITIONS TO AVOID
STABLE	X N/A
INCOMPATABILITY (MATERIALS TO AVOID) ACIDS	

HAZARDOUS DECOMPOSITION PRODUCTS N/A
 HAZARDOUS MAY OCCUR CONDITIONS TO AVOID
 POLYMERIZATION WILL NOT OCCUR X N/A
 SECTION VII - SPILL OR LEAK PROCEDURES
 STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
 MOP UP CAREFULLY AND PLACE INTO A CONTAINER. ADD AMMONIUM HYDROXIDE TO
 PRECIPITATE
 THE MERCURY. DISPOSE OF AS HAZARDOUS WASTE.
 WASTE DISPOSAL METHOD
 ADD AMMONIUM HYDROXIDE UNTIL ALL OF THE MERCURY SALT IS PRECIPITATED DISPOSE
 OF AS HAZARDOUS WASTE.

SECTION VIII - SPECIAL PROTECTION INFORMATION
 RESPIRATORY PROTECTION ((SPECIFY TYPE) NONE
 VENTILATION LOCAL EXHAUST X SPECIAL
 MECHANICAL (GENERAL) OTHER
 PROTECTIVE GLOVES EYE PROTECTION
 RUBBER GLOVES GOGGLES
 OTHER PROTECTIVE EQUIPMENT LAB COAT

SECTION IX - SPECIAL PRECAUTIONS
 PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
 PROTECT AGAINST PHYSICAL DAMAGE. STORE IN WELL CLOSED, STRONG BOTTLES AWAY FROM
 ACIDS. AVOID CONTACT WITH SKIN OR CLOTHING.
 OTHER PRECAUTIONS

LAST PAGE

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MATERIAL SAFETY DATA SHEET

SECTION I

MANUFACTURER'S NAME LAMOTTE CHEMICAL PRODUCTS CO. EMERGENCY TELEPHONE NO. 301-778-3100
 ADDRESS
 P.O. BOX 329, CHESTERTOWN, MD 21620
 CHEMICAL NAME AND SYNONYMS SILVER NITRATE TRADE NAME AND SYNONYMS
 CHLORIDE TEST SOLUTION (CODE 5111)
 CHEMICAL FAMILY FORMULA
 SALT AGNO3 9002

SECTION II - HAZARDOUS INGREDIENTS
 PAINTS, PRESERVATIVES, & SOLVENTS % TLV ALLOYS AND METALLIC COATINGS % TLV

	(UNITS)	(UNITS)
PIGMENTS	BASE METAL	
CATALYST	ALLOYS	
VEHICLE	METALLIC COATINGS	
	FILLER METAL	
SOLVENTS	N/A	PLUS COATING OR CORE FLUX N/A
ADDITIVES		OTHERS
OTHERS		

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS OR GASES TLV
 SILVER NITRATE CAS #7761-88-8 % (UNITS)
 5%

SECTION III - PHYSICAL DATA
 BOILING POINT (DEG. F.) UNKNOWN SPECIFIC GRAVITY (H2O=1) UNKNOWN
 UNKNOWN
 PERCENT, VOLATILE
 VAPOR PRESSURE (MM HG.) UNKNOWN BY VOLUME (%) UNKNOWN
 EVAPORATION RATE
 VAPOR DENSITY (AIR=1) UNKNOWN (_____=1) UNKNOWN
 SOLUBILITY IN WATER COMPLETE
 APPEARANCE AND ORDOR CLEAR, COLORLESS LIQUID

SECTION IV - FIRE AND EXPLOSION HAZARD DATA
 FLASH POINT (METHOD USED) FLAMMABLE LIMITS LEL UEL
 EXTINGUISHING MEDIA
 SPECIAL FIRE FIGHTING PROCEDURES
 NO FIRE HAZARD
 UNUSUAL FIRE AND EXPLOSION HAZARDS

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

UNKNOWN

EFFECTS OF OVEREXPOSURE

MAY CAUSE SKIN IRRITATION AND STAINING.

EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT - FLUSH WITH WATER, CONSULT A PHYSICIAN

EXTERNAL - WASH WITH SOAP AND WATER

INTERNAL - GIVE WATER, CONSULT A PHYSICIAN

SECTION VI - REACTIVITY DATA

STABILITY UNSTABLE CONDITIONS TO AVOID

STABLE X. N/A

INCOMPATIBILITY (MATERIALS TO AVOID)

N/A

CONDITIONS TO AVOID

MAY OCCUR

HAZARDOUS

POLYMERIZATION

WILL NOT OCCUR X N/A

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

MOP UP. WASH DOWN DRAIN WITH EXCESS WATER.

WASTE DISPOSAL METHOD

WASH DOWN DRAIN WITH EXCESS OF WATER.

SECTION VIII SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (SPECIFY TYPE)

NONE

LOCAL EXHAUST

SPECIAL

VENTILATION

NONE

MECHAICAL (GENERAL)

OTHER

NONE

PROTECTIVE GLOVES

EYE PROTECTION

PLASTIC GLOVES

SAFETY GOGGLES

OTHER PROTECTIVE EQUIPMENT

LAB COAT

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

PROTECT FROM PHYSICIAN DAMAGE. KEEP WELL CLOSED AND OUT OF SUNLIGHT. AVOID

PROLONGED OR REPEATED CONTACT WITH SKIN. AVOID INGESTION.

OTHER PRECAUTIONS

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MATERIAL SAFETY DATA SHEET

SECTION 1

MANUFACTURER'S NAME

EMERGENCY TELEPHONE

LAMOTTE CHEMICAL PRODUCTS CO.

301-778-3100

ADDRESS

P.O. BOX 329, CHESTERTOWN, ND 21620

CHEMICAL NAME AND SNYNONYMS

TRADE NAME AND SYNONYMS

MAGNESIUM RGT. #1 (CODE 5140)

CHEMICAL FAMILY

FORMULA

SECTION II - HAZARDOUS INGREDIENTS

TLV

TLV

PAINTS, PRESERVATIVES, & SOLVENTS %

ALLOYS AND METALLIC

COATINGS

(UNITS)

(UNITS)

PIGMENTS

BASE METAL

CATALYST

ALLOYS

VEHICLE

N/A

METALLIC COATINGS

N/A

FILLER METAL

SOLVENTS

PLUS COATING COREFLUX

ADDITIVES

OTHERS

OTHERS

TLV

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES

% (UNITS)

METHANOL CAS #67-56-1

50%-----

CLAYTON YELLOW

0.05%-----

SECTION III - PHYSICAL DATA

BOILING POINT (DEG F)	UNKNOWN	SPECIFIC GRAVITY (H2O=1)	UNKNOWN
VAPOR PRESSURE (MM HG.)	UNKNOWN	PERCENT, VOLATILE BY VOLUME (%)	UNKNOWN
VAPOR DENSITY (AIR=1)	UNKNOWN	EVAPORATE RATE (------=1)	UNKNOWN
SOLUBILITY IN WATER	INF		
APPEARANCE AND ODOR	CLEAR, YELLOW LIQUID		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED)	54 DEG F (CLOSED CUP)	FLAMMABLE LIMITS	LEL UEL 6% 36.5%
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EXTINGUISHING MEDIA DRY CHEMICAL OR CO2 EXTINGUISHERS; WATER SPRAY

SPECIAL FIRE FIGHTING PROCEDURES

UNUSUAL FIRE AND EXPLOSION HAZARDS CAN BE IGNITED AT ALL NORMAL TEMPERATURES

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SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE UNKNOWN

EFFECTS OF OVEREXPOSURE
MAY BE FATAL IF SWALLOWED. CAN CAUSE SKIN IRRITATION. BREATHING OF VAPORS MAY CAUSE DIZZINESS, NAUSEA.

EMERGENCY AND FIRST AID PROCEDURES
EYE CONTACT - IMMEDIATELY FLUSH THOROUGHLY WITH WATER FOR 15 MIN., CONSULT A PHYSICIAN.

EXTERNAL - WASH THOROUGHLY WITH SOAP AND WATER.
INTERNAL - IMMEDIATELY CALL A PHYSICIAN!!!!

SECTION VI - REACTIVITY DATA

STABILITY	UNSTABLE	CONDITIONS TO AVOID
	STABLE	HEAT

INCOMPATIBILITY (MATERIALS TO AVOID) N/A

HAZARDOUS DECOMPOSITION PRODUCTS N/A

HAZARDOUS POLYMERIZATION MAY OCCUR

	WILL NOT OCCUR	X	N/A
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SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
ELIMINATE ALL SOURCES OF IGNITION AND FLAMMABLE. ABSORB ON PAPER. EVAPORATE ON AN IRON PAN IN A HOOD. BURN THE PAPER.

WASTE DISPOSAL METHOD
ATOMIZE INTO AN INCINERATOR.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION SPECIFY TYPE) NONE

LOCAL EXHAUST		SPECIAL	-----
MECHANICAL (GENERAL)		OTHER	
	FUME HOOD		
PROTECTIVE GLOVES		EYE PROTECTION	
	PLASTIC GLOVES		GOGGLES
OTHER PROTECTIVE EQUIPMENT			
		LAB COAT	

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
 PROTECT AGAINST PHYSICAL DAMAGE. STORE AWAY FROM HEAT. KEEP ALL CLOSED. AVOID
 CONTACT WITH SKIN OR CLOTHING. AVOID BREATHING VAPORS. USE ADEQUATE
 VENTILATION.

OTHER PRECAUTIONS

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MATERIAL SAFETY DATA SHEET
 SECTION I

MANUFACTURER'S NAME

EMERGENCY TELEPHONE NO.

LAMOTTE CHEMICAL PRODUCTS CO

301-778-3100

ADDRESS

PO BOX 329, CHESTERTOWN, MD 21620

CHEMICAL NAME AND SYNONYMS

TRADE NAME AND SYNONYMS

MANAGANESE RGT #1 CODE 5143

CHEMICAL FAMILY

FORMULA

SECTION II HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES & SOLVENTS	% TLV	ALLOYS AND METALLIC COATINGS	% TLV
			(UNITS)

PIGMENTS

BASE METAL

CATALYST

ALLOYS

VEHICLE

N/A

METALLIC COATINGS

N/A

SOLVENTS

FILLER METAL

PLUS COATING OR COREFLUX

ADDITIVES

OTHERS

OTHERS

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	%	TLV
		(UNITS)

HYDROCHLORIC ACID (HCl) CAS #7647-01-0

6.6%

ORTHO-TOLIDINE CAS #119-93-7

0.135%

SECTION III PHYSICAL DATA

BOILING POINT (DEG F)

PERCENT GRAVITY (H2O=1)

UNKNOWN

UNKNOWN

VAPOR PRESSURE (MM HG.)

PERCENT, VOLATILE

UNKNOWN

UNKNOWN

VAPOR DENSITY (AIR=1)

BY VOLUME (%)

UNKNOWN

UNKNOWN

SOLUBILITY IN WATER

INF

APPEARANCE AND ODOR CLEAR, COLORLESS LIQUID

SECTION IV FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED)

FLAMMABLE LIMITS

LEL

UEL

EXTINGUISHING MEDIA

SPECIAL FIRE FIGHTING PROCEDURES

NO FIRE HAZARD

UNUSUAL FIRE AND EXPLOSION HAZARDS

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SECTION V HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

UNKNOWN

EFFECTS OF OVEREXPOSURE

MAY CAUSE SKIN IRRITATION. O-TOLIDINE IS A SUSPECTED CARCINOGEN.

EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT - IMMEDIATELY FLUSH THOROUGHLY WITH WATER, CONSULT A PHYSICIAN.

EXTERNAL-IMMEDIATELY FLUSH SKIN WITH WATER, REMOVE AFFECTED CLOTHING AND FLUSH SKIN THOROUGHLY; WASH THOROUGHLY WITH SOAP AND WATER.
INTERNAL - DO NOT INDUCE VOMITING; RINSE MOUTH WITH WATER, DRINK GLASSFUL OF WATER

AND CALL A PHYSICIAN IMMEDIATELY.
SECTION VI REACTIVITY DATA

STABILITY

UNSTABLE
STABLE
X
CONDITIONS TO AVOID
N/A

INCOMPATIBILITY

ALKALIES

HAZARDOUS DECOMPOSITION PRODUCTS

N/A

HAZARDOUS

MAY OCCUR

CONDITIONS TO AVOID

WILL NOT OCCUR

X

N/A

SECTION VII SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
COVER CONTAMINATED AREA WITH SODIUM BICARBONATE. WASH SLURRY DOWN DRAIN WITH EXCESS WATER.

WASTE DISPOSAL METHOD

ADD SLOWLY TO A SOLUTION OF SODA ASH AND SLAKED LIME. ADD NEUTRALIZED SOLUTION TO EXCESS OF RUNNING WATER AND WASH DOWN DRAIN.

SECTION VIII SPECIAL PROTECTION ON INFORMATION

RESPIRATORY PROTECTION

NONE

VENTILATION

LOCAL EXHAUST

X

SPECIAL

MECHANICAL

OTHER

PROTECTIVE GLOVES

EYE PROTECTION

PLASTIC GLOVES

GOGGLES

OTHER PROTECTIVE EQUIPMENT

LAB COAT

SECTION IX SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

PROTECT AGAINST PHYSICAL DAMAGE. STORE AWAY FROM ALKALIES. AVOID CONTACT WITH SKIN OR CLOTHING.

OTHER PRECAUTIONS

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MATERIAL SAFETY DATA SHEET

SECTION 1

MANUFACTURER'S NAME

EMERGENCY TELEPHONE NO.

LAMOTTE CHEMICAL PRODUCTS CO.

301-778-3100

ADDRESS

P.O BOX 329, CHESTERTOWN, MD 21620

CHEMICAL NAME AND SYNONYMS

TRADE NAME AND SYNONYMS (CODE 5145)

SODIUM HYDROXIDE (CAUSTIC SODA)

MANGANESE-MAGNESIUM RGT9 #3

CHEMICAL FAMILY

FORMULA

CAUSTIC ALKALI

NAOH

SECTION II - HAZARDOUS INGREDIENTS

TLV

TLV

PAINTS, PRESERVATIVES, & SOLVENTS % (UNITS)

ALLOYS AND METALLIC COATINGS % (UNITS)

PIGMENTS

BASE METAL

CATALYST

ALLOYS

VEHICLE

N/A

METALLIC COATINGS

N/A

N/A

SOLVENTS

FILLER METAL

ADDITIVES

PLUS COATING OR CORE FLUX

OTHERS

TLV

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES
SODIUM HYDROXIDE CAS #1310-73-2

% (UNITS)
15% -----

SECTION III - PHYSICAL DATA

BOILING POINT (DEG F)	UNKNOWN	SPECIFIC GRAVITY (H2O=1)	UNKNOWN
VAPOR PRESSURE (MM HG.)	UNKNOWN	PERCENT, VOLATILE BY VOLUME (%), EVAPORATION RATE (_____ =1)	UNKNOWN
VAPOR DENSITY (AIR=1)	UNKNOWN		UNKNOWN
SOLUBILITY IN WATER	SOLUBLE		
APPEARANCE AND ODOR	CELAR, COLORLESS LIQUID; SLIGHT SLIPPERY FEELING		
	SECTION IV - FIRE AND EXPLOSION HAZARD DATA		
FLASH POINT (METHOD USED)		FLAMMABLE LIMITS	LEL UEL
EXTINGUISHING MEDIA			
SPECIAL FIRE FIGHTING PROCEDURES	NO FIRE HAZARD		
UNUSUAL FIRE AND EXPLOSION HAZARDS			

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SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE
 CAUSES SKIN BURNS.
 EMERGENCY AND FIRST AID PROCEDURES
 EYE CONTACT - IMMEDIATELY FLUSH WITH WATER FOR 15 MIN., CONSULT A PHYSICIAN.
 EXTERNAL - IMMEDIATELY FLUSH SKIN WITH WATER; REMOVE AFFECTED CLOTHING AND FLUSH SKIN THOROUGHLY.
 INTERNAL - DO NOT INDURE VOMITING; RINSE MOUTH WITH WATER, DRINK GLASSFUL OF WATER AND CALL A PHYSICIAN IMMEDIATELY.

SECTION VI - REACTIVITY DATA

STABILITY CONDITIONS TO AVOID
 UNSTABLE
 STABLE X N/A

INCOMPATIBILITY (MATERIALS TO AVOID)
 ACIDS N/A

HAZARDOUS DECOMPOSITION PRODUCTS
 CONDITIONS TO AVOID
 MAY OCCUR

HAZARDOUS POLYMERIZATION
 WILL NOT OCCUR X N/A

SECTION VI - SPILL LEAK PROCEDURES
 STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
 NEUTRALIZE WITH 6M-HCL AND MOP UP. DISCHARGE TO SEWER WITH EXCESS OF WATER.
 WASTE DISPOSAL METHOD
 POUR INTO A TANK OF WATER, NEUTRALIZE, TRANSFER TO SEWER WITH EXCESS OF WATER.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (SPECIFY TYPE)
 NONE

LOCAL EXHAUST SPECIAL

VENTILATION NONE -----
 MECHANICAL (GENERAL) OTHER -----
 NONE -----

PROTECTIVE GLOVES PLASTIC EYE PROTECTION GOGGLES

OTHER PROTECTIVE EQUIPMENT
 LAB COAT

SECTION IX - SPECIAL PRECAUTIONS
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
PROTECT AGAINST PHYSICAL DAMAGE. STORE AWAY FROM ACIDS. AVOID CONTACT WITH SKIN
OR CLOTHING. WASH THOROUGHLY AFTER HANDLING.
OTHER PRECAUTIONS

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MATERIAL SAFETY DATA SHEET
SECTION I

MANUFACTURER'S NAME
LAMOTTE CHEMICAL PRODUCTS CO.
ADDRESS
P.O. BOX 329, CHESTERTOWN, MD 21620
CHEMICAL NAME AND SYNONYMS

CHEMICAL FAMILY -----

EMERGENCY TELEPHONE NO.
301-778-3100

TRADE NAME AND SYNONYMS
NITRATE TEST RGT.#1(CODE 5146)

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES & SOLVENTS % TLV	ALLOYS AND METALLIC COATINGS	% TLV
PIGMENTS	BASE METAL	
CATALYST	ALLOYS	
VEHICLE	METALLIC COATING	N/A
SOLVENTS	PLUS COATING OR CORE FLUX	
ADDITIVES	OTHERS	
OTHERS		

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES % TLV

SODIUM BISULFATE (NAHSO4) CAS #7681-38-1	25.4%
AMMONIUM SULFATE (NH4)2SO4 CAS#7783-20-2	7%
CRESOL RED CAS #602-48-2	

SECTION III - PHYSICAL DATA

BOILING POINT (DEG F.)	UNKNOWN	SPECIFIC (H2O=1)	UNKNOWN
VAPOR PRESSURE (MM HG.)	UNKNOWN	BY VOLUME (%)	UNKNOWN
VAPOR DENSITY (AIR=1)	UNKNOWN	(-----=1	UNKNOWN
SOLUBILITY IN WATER	SOLUBLE		
APPEARANCE AND ODOR	CLEAR, PINK SOLUTION		

SECTION IV FIRE AND EXPLOSION HAZARD DATA

FLASH POINT METHOD USED	FLAMMABLE LIMITS	LEL
EXTINGUISHING MEDIA		
SPECIAL FIRE FIGHTING PROCEDURES	NO FIRE HAZARD	
UNUSUAL FIRE AND EXPLOSION HAZARDS		

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SECTION V - HEALTH HAZARD DATA

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THRESHOLD LIMIT VALUE
UNKNOWN

EFFECTS OF OVEREXPOSURE
CAUSES SKIN IRRITATION.

EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT - IMMEDIATELY FLUSH THOROUGHLY WITH WATER FOR 15 MIN., CONSULT A
PHYSICIAN.

EXTERNAL-FLUSH SKIN THOROUGHLY WITH WATER; REMOVE AFFECTED CLOTHING AND FLUSH
SKIN THOROUGHLY. WASH THOROUGHLY WITH SOAP AND WATER.

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

UNKNOWN

EFFECTS OF OVEREXPOSURE

MAY CAUSE SKIN IRRITATION.

EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT - IMMEDIATELY FLUSH THOROUGHLY WITH WATER.

EXTERNAL - FLUSH WITH WATER THEN WASH WITH SOAP AND WATER AFTER HANDLING.

INTERNAL - GIVE WATER, CONSULT PHYSICIAN.

SECTION VI - REACTIVITY DATA

STABILITY

UNSTABLE

CONDITIONS TO AVOID

STABLE

X

CONDITIONS TO AVOID

N/A

INCOMPATIBILITY

N/A

HAZARDOUS DECOMPOSITION PRODUCTS

N/A

CONDITIONS TO AVOID

MAY OCCUR

HAZARDOUS

POLYMERIZATION

WILL NOT OCCUR

X

N/A

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

COLLECT. DISSOLVE IN EXCESS WATER. NEUTRALIZE WITH SODA ASH. WASH DOWN DRAIN WITH EXCESS AMOUNTS OF WATER.

WASTE DISPOSAL METHOD

DISSOLVE IN EXCESS AMOUNTS OF WATER. NEUTRALIZE WITH WATER. WASH DOWN DRAIN WITH EXCESS WATER.

SECTION VIII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (SPECIFY TYPE)

NONE

VENTILATION

LOCAL EXHAUST

SPECIAL

X

MECHANICAL (GENERAL)

OTHER

PROTECTIVE GLOVES

EYE PROTECTION

RUBBER GLOVES

GOGGLES

OTHER PROTECTIVE EQUIPMENT

LAB COAT

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING

PROTECT AGAINST PHYSICAL DAMAGE. STORE IN WELL CLOSED CONTAINER.

AVOID PROLONGED CONTACT WITH SKIN OR CLOTHING.

OTHER PRECAUTIONS

MATERIAL SAFETY DATA SHEET

SECTION I

MANUFACTURER'S NAME

EMERGENCY TELEPHONE NO

LAMOTTE CHEMICAL PRODUCTS COMPAYN

301-778-3100

ADDRESS

P.O. BOX 329, CHESTERTOWN, MD 21620

CHEMICAL NAME AND SYNONYMS

TRADE NAME AND SYNONYMS

SODIUM HYDROXIDE (CAUSTIC SODA)

NITRITE NITROGEN 3 (CODE 5153)

CHEMICAL FAMILY

FORMULA

5208

CAUSTIC ALKALI

NAOH

SECTION II - HAZARDOUS INGREDIENTS

TLV

TLV

PAINTS, PRESERVATIVES, & SOLVENTS

%

ALLOYS AND METALLIC COATINGS

%

(UNITS)

(UNITS)

PIGMENTS

BASE METAL

CATALYST		ALLOYS	
VEHICLE		METALLIC COATINGS	
		FILLER METAL	
SOLVENTS	N/A	PLUS COATING OR CORE FLUX	N/A
ADDITIVES		OTHERS	
OTHERS			
			TLV
	HAZARDOUS MIXTURES OF OTHER LIQUID, SOLIDS, OR GASES		% TLV
			(UNITS)
SODIUM HYDROXIDE	CAS #1310-73-2		15% -----
		SECTION III - PHYSICAL DATA	
BOILING POINT (DEG F.)		UNKNOWN	SPECIFIC GRAVITY (H2O=1) UNKNOWN
			PERCENT VOLATILE
VAPOR PRESSURE (MM HG.)		UNKNOWN	BY VOLUME (%) UNKNOWN
			EVAPORATION RATE
VAPOR DENSITY (AIR=1)		UNKNOWN	(-----=1) UNKNOWN
SOLUBILITY IN WATER			
		SOLUBLE	
APPEARANCE AND ODOR		CLEAR, COLORLESS LIQUID, SLIGHT SLIPPERY FEELING	
		SECTION IV - FIRE AND EXPLOSION HAZARD DATA	
FLASH POINT (METHOD USED)			FLAMMABLE LIMITS LEL UEL
EXTINGUISHING MEDIA			
SPECIAL FIRE FIGHTING PROCEDURES			
		NO FIRE HAZARD	
UNUSUAL FIRE AND EXPLOSION HAZARDS			

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		SECTION V HEALTH HAZARD DATA
THRESHOLD LIMIT VALUE		UNKNOWN
EFFECTS OF OVEREXPOSURE		CAUSES SKIN BURNS. MAY BE FATAL IF SWALLOWED.
EMERGENCY AND FIRST AID PROCEDURES		
EYE CONTACT - IMMEDIATELY FLUSH WITH WATER FOR 15 MIN., GET MEDICAL ATTENTION.		
EXTERNAL - FLUSH WITH WATER, REMOVE AFFECTED CLOTHING AND FLUSH SKIN THOROUGHLY.		
INTERNAL - DO NOT INDUCE VOMITING; RINSE MOUTH WITH WATER, DRINK GLASSFUL OF WATER		
		AND CALL A PHYSICIAN IMMEDIATELY.
		SECTION VI - REACTIVITY DATA
STABILITY		CONDITIONS TO AVOID
	UNSTABLE	
	STABLE X	N/A
INCOMPATIBILITY (MATERIALS TO AVOID)		ACIDS
HAZARDOUS DECOMPOSITION PRODUCTS		N/A
		CONDITIONS TO AVOID
	MAY OCCUR	
HAZARDOUS POLYMERIZATION		
	WILL NOT OCCUR X	N/A
		SECTION VII - SPILL OR LEAK PROCEDURES
STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED		
NEUTRALIZED WITH 6M-HCL AND MOP UP. DISCHARGE TO SEWER WITH EXCESS OF WATER.		
WASTE DISPOSAL METHOD		
POUR INTO A TANK OF WATER. NEUTRALIZE. TRANSFER TO SEWER WITH EXCESS OF WATER		
		SECTION VIII - SPECIAL PROTECTION INFORMATION
RESPIRATORY PROTECTION (SPECIFY TYPE)		

LOCAL EXHAUST NONE SPECIAL
 VENTILATION -----
 NONE
 MECHANICAL (GENERAL)
 NONE -----
 PROTECTIVE GLOVES EYE PROTECTION
 PLASTIC GLOVESL SAFETY GLASSES
 OTHER PROTECTIVE EQUIPMENT LAB COAT
 SECTION IX - SPECIAL PRECAUTIONS
 PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
 PROTECT AGAINST PHYSICAL DAMAGE. STORE AWAY FROM ACIDS. AVOID CONTACT WITH SKIN
 OR CLOTHING. WASH THOROUGHLY AFTER HANDLING.
 OTHER PRECAUTIONS

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MATERIAL SAFETY DATA SHEET

SECTION I

MANUFACTURER'S NAME LAMOTTE CHEMICAL PRODUCTS COMPANY EMERGENCY TELEPHONE NO. 301-778-3100
 ADDRESS P.O. BOX 329, CHESTERTOWN, MD 21620
 CHEMICAL NAME AND SYNONYMS PHOSPHORUS REAGENT 3 (CODE 5157)
 CHEMICAL FAMILY FORMULA

5706, 5186, 5820

SECTION II - HAZARDOUS INGREDIENTS

TLV		TLV
PAINTS, PRESERVATIVES, & SOLVENTS %	ALLOYS AND METALLIC COATINGS %	
(UNITS)	(UNITS)	
PIGMENTS	BASE METAL	
CATALYST	ALLOYS	
VEHICLE	METALLIC COATINGS	
	FILLER METAL	
SOLVENTS	N/A	PLUS COATING OR CORE FLUX N/A
ADDITIVES		OTHERS
OTHERS		

HAZARDOUS MIXTURES OF OTHER LIQUID, SOLIDS, OR GASES	%	TLV (UNITS)
POTASSIUM CHLORIDE (KCL) CAS# 7447-40-7	98.45%	-----
STANNOUS CHLORIDE (SNCL2H2O)	1.55%	-----

SECTION III - PHYSICAL DATA

MELTING POINT (KCL) N773DEG	SPECIFIC GRAVITY (H2O=1) (KCL)	1.98
VAPOR PRESSURE (MM HG.)	PERCENT VOLATILE	
VAPOR DENSITY (AIR=1)	UNKNOWN BY VOLUME (%)	UNKNOWN
	EVAPORATION RATE	
SOLUBILITY IN WATER	UNKNOWN (_____ =1)	UNKNOWN
APPEARANCE AND ODOR	SOLUBLE	

WHITE TABLET

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED)	FLAMMABLE LIMITS	LEL	UEL
EXTINGUISHING MEDIA			
SPECIAL FIRE FIGHTING PROCEDURES			
	NO FIRE HAZARD		
UNUSUAL FIRE AND EXPLOSION HAZARDS			

SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE UNKNOWN
 EFFECTS OF OVEREXPOSURE N/A
 EMERGENCY AND FIRST AID PROCEDURES
 EYE CONTACT - FLUSH WITH WATER.
 EXTERNAL - WASH WITH SOAP AND WATER AFTER HANDLING.
 INTERNAL - GIVE PLENTY OF WATER, CONSULT A PHYSICIAN.
 STABILITY SECTION VI - REACTIVITY DATA
 CONDITIONS TO AVOID
 UNSTABLE U
 STABLE
 INCOMPATIBILITY (MATERIALS TO AVOID) X N/A
 HAZARDOUS DECOMPOSITION PRODUCTS N/A
 CONDITIONS TO AVOID
 HAZARDOUS MAY OCCUR
 POLYMERIZATION
 WILL NOT OCCUR X N/A
 SECTION VII - SPILL OR LEAK PROCEDURES
 STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
 SWEEP UP DISSOLVE IN WATER. WASH DOWN DRAIN WITH EXCESS WATER.
 WASTE DISPOSAL METHOD
 DISSOLVE IN BEAKER OF WATER. WASH DOWN DRAIN WITH EXCESS WATER.
 SECTION VIII - SPECIAL PROTECTION INFORMATION
 RESPIRATORY PROTECTION (SPECIFY TYPE)
 NONE
 LOCAL EXHAUST SPECIAL
 VENTILATION
 NONE
 MECHANICAL (GENERAL) OTHER
 NONE
 PROTECTIVE GLOVES EYE PROTECTION
 NONE
 OTHER PROTECTIVE EQUIPMENT
 NONE
 SECTION IX - SPECIAL PRECAUTIONS
 PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
 STORE OUT OF DIRECT SUNLIGHT. KEEP OUT OF REACH OF CHILDREN. AVOID EXTREMES
 OF TEMPERATURE AND MOISTURE. OTHER PRECAUTIONS

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MATERIAL SAFETY DATA SHEET

SECTION I

MANUFACTURER'S NAME EMERGENCY TELEPHONE
 LAMOTTE CHEMICAL PRODUCTS COMPANY 301-778-3100
 ADDRESS
 P.O.BOX 329, CHESTERTOWN, MD 21620
 CHEMICAL NAME AND SYNONYMS TRADE NAME AND SYNONYMS
 ----- POTASSIUM REAGENT B (CODE 5161)
 CHEMICAL FAMILY FORMULA

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES & SOLVENTS %	TLV	ALLOYS AND METTALIC COATINGS	TLV
	(UNITS)		(UNITS)
PIGMENTS	BASE METAL		
CATALYST	ALLOYS		
VEHICLE	METTALIC COATINGS		
	FILLER METAL		
SOLVENTS	PLUS COATING OR COREFLUS		N/A
ADDITIVES	OTHERS		
OTHERS			

		HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES % (UNIT	TLV
SODIUM NITRITE	(NANO2) CAS #7632-00-0		60%---
SODIUM COBALTINITIRE (NA3CO (NO2)8	CAS #13600-98-1		29%---
SODIUM BENZOATE (C6H5COO NA)	CAS #532-32-1		11%---

SECTION III PHYSICAL DATA

BOILING POINT (DEG F.)	UNKNOWN	SPECIFIC GRAVITY (H2O=1)	UNKNOWN
VAPOR PRESSURE (MM HG.)	UNKNOWN	PERCENT, VOLATILE BY VOLUME (%)	UNKNOWN
VAPOR DENSITY (AIR=1)	UNKNOWN	EVAPORATION RATE	UNKNOWN
SOLUBILITY IN WATER	UNKNOWN	(-----=1)	UNKNOWN
APPEARANCE AND ODOR	SOLUBLE GOLD COLORED TABLET		
FLASH (METHOD USED)	SECTION IV - FIRE AND EXPLOSION HAZARD DATA		
EXTINGUISHING MEDIA	FLAMMABLE LIMITS		LEL UEL
SPECIAL FIRE FIGHTING PROCEDURES	NO FIRE HAZARD		
UNUSUAL FIRE AND EXPLOSION HAZARDS			

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SECTION V - HEALTH HAZARD DATA
THRESHOLD LIMIT VALUE

UNKNOWN

EFFECTS OF OVEREXPOSURE

MAY BE FATAL IF SWALLOWED.

EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT - FLUSH THOROUGHLY WITH WATER, CONSULT A PHYSICIAN.

EXTERNAL - WASH WITH SOAP AND WATER AFTER HANDLING.

INTERNAL - INDUCE VOMITING, CALL A PHYSICIAN IMMEDIATELY.

SECTION VI - REACTIVITY DATA

STABILITY

CONDITIONS TO AVOID

UNSTABLE

STABLE

X

N/A

INCOMPATIBILITY (MATERIALS TO AVOID)

N/A

HAZARDOUS DECOMPOSITION PRODUCTS

N/A

CONDITIONS TO AVOID

MAY OCCUR

HAZARDOUS

POLYMERIZATION

WILL NOT OCCUR

X

N/A

SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

SWEEP UP TABLETS. MIX WITH SODIUM BICARBONATE AND WATER IN A LARGE BEAKER. ADD AN EQUAL VOLUME OF CALCIUM HYPOCHLORITE. ADD MORE WATER AND STIR. ALLOW TO STAND FOR ONE HOUR. DILUTE AND NEUTRALIZE. TRANSFER TO DRAIN WITH EXCESS OF WATER.

WASTE DISPOSAL METHOD

SECTION VII - SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION (SPECIFY TYPE)

NONE

LOCAL EXHAUST

SPECIAL

VENTILATION

NONE

MECHANICAL (GENERAL)

OTHER

NONE

PROTECTIVE GLOVES

EYE PROTECTION

PLASTIC GLOVES

NONE

OTHER PROTECTIVE EQUIPMENT

NONE

SECTION IX - SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
 STORE OUT OF DIRECT SUNLIGHT. KEEP OUT OF REACH OF CHILDREN. AVOID EXTREMES OF
 TEMPERATURE AND MOISTURE.
 OTHER PRECAUTIONS.

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MATERIAL SAFETY DATA SHEET
 SECTION I

MANUFACTURER'S NAME LAMOTTE CHEMICAL PRODUCTS COMPANY	EMERGENCY TELEPHONE NO. 301-778-3100
ADDRESS P.O. BOX 239, CHESTERTON, MD 21620	
CHEMICAL NAME AND SYNONYMS	TRADE NAME AND SYNONYMS

CHEMICAL FAMILY	-----	POTASSIUM REAGENT C (CODE 516)	FORMULA
	-----		5134

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESEVATIVES, & SOLVENTS % (UNITS)	TLV	ALLOYS AND METALLIC COATINGS % (UNITS)	TLV
PIGMENTS		BASE METAL	
CATALYST		ALLOYS	
VEHICLE		METALLIC COATINGS	
		FILLER METAL	
SOLVENTS	N/A	PLUS COATING OR CORE FLUX	N/A
ADDITIVES		OTHERS	
OTHERS			

			TLV (UNITS)
HAZARDOUS MIXTURES OF OTHER LIQUID, SOLIDS, OR GASES	%		
3A ALCOHOL	CAS #64-17-5	84%	----
METHYL RED	CAS #492-52-7	<0.01%	----

SECTION III - PHYSICAL DATA

BOILING POINT (DEG F)	UNKNOWN	SPECIFIC GRAVITY (H2O=1)	UNKNOWN
		PERCENT VOLATILE	
VAPOR PRESSURE (MM HG.)	UNKNOWN	BY VOLUME (%)	UNKNOWN
		EVAPORATION RATE	
VAPOR DENSITY (AIR=1)	UNKNOWN	(_____ =1)	UNKNOWN
SOLUBILITY IN WATER	INF		
APPEARANCE AND ODOR	CLEAR, YELLOW LIQUID		

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED)	UNKNOWN	FLAMMABLE LIMITS	LEL UEL
---------------------------	---------	------------------	---------

EXTINGUISHING MEDIA

DRY CHEMICAL OR CARBON DIOXIDE EXTINGUISHER.

SPECIAL FIRE FIGHTING PROCEDURES

UNUSUAL FIRE AND EXPLOSION HAZARDS

CAN BE IGNITED AT ALMOST ALL TEMPERATURES.

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SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

UNKNOWN

EFFECTS OF OVEREXPOSURE

IRRITANT - CAN CAUSE INFLAMMATION SLIGHTLY TOXIC.
 VAPORS HARMFUL.

EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT - FLUSH THOROUGHLY WITH WATER, CONSULT A PHYSICIAN.

EXTERNAL - WASH THOROUGHLY WITH SOAP AND WATER.
INTERNAL - CALL A PHYSICIAN IMMEDIATELY.

SECTION VI - REACTIVITY DATA
STABILITY CONDITIONS TO AVOID

UNSTABLE
STABLE X N/A

INCOMPATIBILITY (MATERIAL TO AVOID)
N/A

HAZARDOUS DECOMPOSITION PRODUCTS
N/A
CONDITIONS TO AVOID
MAY OCCUR

HAZARDOUS
POLYMERIZATION

WILL NOT OCCUR X N/A
SECTION VII - SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
ELIMINATE ALL SOURCES OF IGNITION AND FLAMMABLES.
ABSORB ON PAPER. EVAPORATE ON AN IRON PAN IN A HOOD. BURN THE PAPER.
WASTE DISPOSAL METHOD
ATOMIZE INTO AN INCINERATOR.

SECTION VIII - SPECIAL PROTECTION INFORMATION
RESPIRATORY PROTECTION (SPECIFY TYPE)

NONE
VENTILATION LOCAL EXHAUST X SPECIAL
MECHANICAL (GENERAL) OTHER
FUME HOOD
EYE PROTECTION GOGGLES
PROTECTIVE GLOVES PLASTIC GLOVES
OTHER PROTECTIVE EQUIPMENT

LAB COAT
SECTION IX - SPECIAL PRECAUTIONS
PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
PROTECT AGAINST PHYSICAL DAMAGE. STORE IN A WELL CLOSED CONTAINER AWAY FROM
HEAT AND OUT OF LIGHT. AVOID PROLONGED OR REPEATED CONTACT WITH SKIN OR
CLOTHING.
OTHER PRECAUTIONS

USE WITH ADEQUATE VENTILATION.

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MATERIAL SAFETY DATA SHEET

SECTION I

MANUFACTURER'S NAME LAMOTTE CHEMICAL PRODUCTS COMPANY
ADDRESS PO BOX 329, CHESTERTOWN, MD 21620
CHEMICAL NAME AND SYNONYMS
CHEMICAL FAMILY

EMERGENCY TELEPHONE NO 301-778-3100
TRADE NAME AND SYNONYMS
SULFATE TEST REAGENT CODE 517
FORMULA

5205, 9003

SECTION II HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES & SOLVENTS % TVL ALLOYS & METALLIC COATINGS % TLV
(UNITS)
% TLV (UNITS)
PIGMENTS BASE METAL
CATALYST ALLOYS
VEHICLE METALLIC COATINGS
SOLVENTS NA FILLER METAL
PLUS COATING OR CORE FLUX NA
ADDITIVES OTHERS
OTHERS

HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS OR GASES % TVL
UNITS

BARIUM CHLORIDE CAS #10361-37-2 5%
HYDROCHLORIC ACID CAS #7647-01-0 0.06%

SECTION III PHYSICAL DATA

BOILING POINT (DEG F) UNKNOWN SPECIFIC GRAVITY (H2O=1)
UNKNOWN
VAPOR PRESSURE (MM HG) PERCENT, VOLATILE
BY VOLUME (%) UNKNOWN
UNKNOWN UNKNOWN

VAPOR DENSITY (AIR=1)

EVAPORATION RATE

UNKNOWN
SOLUBILITY IN WATER
APPRECIABLE)

(_____ =1)
UNKNOWN

APPEARANCE AND ODOR
CLEAR COLORLESS LIQUID: ODORLESS

SECTION IV FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD USED) FLAMMABLE LEL UEL
EXTINGUISHING MEDIA
SPECIAL FIRE FIGHTING PROCEDURES
NO FIRE HAZARD
UNUSUAL FIRE AND EXPLOSION HAZARDS

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SECTION V HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

UNKNOWN

EFFECTS OF OVEREXPOSURE

POISONOUS

EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT - FLUSH THOROUGHLY WITH WATER, CONSULT A PHYSICIAN. EXTERNAL: WASH THOROUGHLY WITH SOAP AND WATER. INTERNAL: INDUCE VOMITING, CALL A PHYSICIAN

SECTION VI REACTIVITY DATA

STABILITY UNSTABLE CONDITIONS TO AVOID
STABLE X

INCOMPATIBILITY (MATERIALS TO AVOID): NA

HAZARDOUS DECOMPOSITION PRODUCTS NA

HAZARDOUS MAY APPEAR CONDITIONS TO AVOID

POLYMERIZATION N/A
WILL NOT OCCUR X NA

SECTION VII SPILL OR LEAK PROCEDURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
COVER WITH SODA ASH, MIX AND SCOOP INTO A BEAKER OF WATER. NEUTRALIZE WITH 6M-HCL AND WASH DOWN DRAIN WITH EXCESS WATER

WASTE DISPOSAL METHOD

ADD SLOWLY TO A LARGE CONTAINER OF WATER. STIR IN SLIGHT EXCESS OF SODA ASH. LET STAND 24 HRS. NEUTRALIZE WITH 6M-HCL BEFORE WASHING DOWN DRAIN WITH LARGE EXCESS OF WATER.

SECTION VIII SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION

NONE

VENTILATION

LOCAL EXHAUST

X

SPECIAL

MECHANICAL

PROTECTIVE GLOVES

EYE PROTECTION

PLASTIC GLOVES

SAFETY GLASSES

OTHER PROTECTIVE EQUIPMENT

LAB COAT

SECTION IX SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
PROTECT AGAINST PHYSICAL DAMAGE. KEEP WELL CLOSED. AVOID PROLONGED OR REPEATED CONTACT WITH SKIN OR CLOTHING.

OTHER PRECAUTIONS

WASH THOROUGHLY AFTER HANDLING.

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MATERIAL SAFETY DATA SHEET

SECTION I

MANUFACTURER'S NAME

EMERGENCY TELEPHONE NO.

LAMOTTE CHEMICAL PRODUCTS COMPANY
ADDRESS
P.O. BOX 329, CHESTERTOWN, MD 21620
CHEMICAL NAME AND SYNONYMS

301-778-3100

TRADE NAME AND SYNONYMS (CODE 5173)
UNIVERSAL EXTRACTING SOLN. 5100
FORMULA

CHEMICAL FAMILY ----- 5102, 5107, 5112
5113

SECTION II - HAZARDOUS INGREDIENTS

PAINTS, PRESERVATIVES, & SOLVENTS %	TLV	ALLOYS AND METALLIC COATINGS	TLV
	UNITS		%
PIGMENTS		BASE METAL	
CATALYST		ALLOYS	
VEHICLE		METALLIC COATINGS	
	N/A		N/A
SOLVENTS		FILLER METAL	
ADDITIVES		PLUS COATING OR COREFLUX	
OTHERS		OTHERS	

	HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS, OR GASES	TLV
SODIUM ACETATE (NAC2H3O2.2H2O) CAS #6131-90-4		% (UNITS)
ACETIC ACID (CH3COOH) CAS #64-19-7		9.75% ---
		3.5% ---

SECTION III - PHYSICAL DATA

BOILING POINT (DEG F.)	UNKNOWN	SPECIFIC GRAVITY (H2O=1)	UNKNOWN
		PERCENT, VOLATILE	
VAPOR PRESSURE (MM HG.)	UNKNOWN	BY VOLUME (%)	UNKNOWN
		EVAPORATION RATE	
VAPOR DENSITY (AIR=1)	UNKNOWN	(-----=1)	UNKNOWN
SOLUBILITY IN WATER	SOLUBLE	PH	4.9

APPEARANCE AND ODOR CLEAR, COLORLESS LIQUID; VINEGAR TYPE ODOR
SECTION IV - FIRE AND EXPLOSION HAZARD DATA

FLASH (METHOD USED)	FLAMMABLE LIMITS	LEL	UEL
EXTINGUISHING MEDIA			
SPECIAL FIRE FIGHTING PROCEDURES			
	NO FIRE HAZARD		
UNUSUAL FIRE AND EXPLOSION HAZARDS			

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SECTION V - HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE UNKNOWN

EFFECTS OF OVEREXPOSURE MAY CAUSE SKIN IRRITATION.

EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT - FLUSH THOROUGHLY WITH WATER, CONSULT A PHYSICIAN.

EXTERNAL - WASH WITH SOAP AND WATER.

INTERNAL - GIVE PLENTY OF WATER OR MILK, CALL A PHYSICIAN.

SECTION VI REACTIVITY DATA

STABILITY	UNSTABLE	CONDITIONS TO AVOID
	STABLE	
	X	N/A
INCOMPATIBILITY (MATERIALS TO AVOID)		N/A
HAZARDOUS DECOMPOSITION PRODUCTS		N/A

CONDITIONS TO AVOID

MAY OCCUR
 HAZARDOUS
 POLYMERIZATION
 WILL NOT OCCUR X N/A
 SECTION VII - SPILL OR LEAK PROCEDURES
 STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED
 COVER WITH SODIUM BICARBONATE. SCOOP UP SLURRY, WASH DOWN DRAIN WITH EXCESS
 WATER.
 WASTE DISPOSAL METHOD
 NEUTRALIZE. WASH DOWN DRAIN WITH EXCESS WATER.
 SECTION VII - SPECIAL PROTECTION INFORMATION
 RESPIRATORY PROTECTION (SPECIFY TYPE)
 NONE
 LOCAL EXHAUST SPECIAL
 VENTILATION N/A ----
 MECHANICAL (GENERAL) OTHER -----
 PROTECTIVE GLOVES EYE PROTECTION
 PLASTIC GLOVES SAFETY GLASSES
 OTHER PROTECTIVE EQUIPMENT
 NONE
 SECTION IX - SPECIAL PRECAUTIONS
 PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING
 PROTECT AGAINST PHYSICAL DAMAGE. KEEP WELL CLOSED. AVOID PROLONGED OR REPEATED
 CONTACT WITH SKIN OR CLOTHING.
 OTHER PRECAUTIONS.

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DOC 9 MATERIAL SAFETY DATA SHEET

SECTION I

MANUFACTURER'S NAME
 EMERGENCY TELEPHONE NO.
 LAMOTTE CHEMICAL PRODUCTS CO.
 ADDRESS
 PO BOX 329, CHESTERTOWN, MD 21620
 CHEMICAL NAME AND SYNONYMS
 TRADE NAME AND SYNONYMS
 ALUMINUM TEST SOLUTION (CODE 5101)
 FORMULA
 5191

SECTION II HAZARDOUS INGREDIENTS
 PAINTS, PRESERVATIVES & SOLVENTS % TLV ALLOYS AND METALLIC COATINGS % TLV
 (UNITS) (UNITS)
 PIGMENTS BASE METAL
 CATALYST ALLOYS
 VEHICLE METALLIC COATINGS
 SOLVENTS N/A FILLER METAL N/A
 PLUS COATING OR CORE FLUX
 ADDITIVES OTHERS
 HAZARDOUS MIXTURES OF OTHER LIQUIDS, SOLIDS OR GASES % TLV
 (UNITS)
 ISOPROPANOL CAS #67-63-0 99%
 HEMATEIN CAS #475-25-2 0.054%

SECTION III PHYSICAL DATA
 BOILING POINT (DEG F) 207 DEG SPECIFIC GRAVITY (H2O=1) 0.8
 VAPOR PRESSURE (MM HG.) UNKNOWN PERCENT, VOLATILE
 BY VOLUME (%) UNKNOWN
 VAPOR DENSITY (AIR=1) 2.1 EVAPORATION RATE
 (----- =1) UNKNOWN
 SOLUBILITY IN WATER INF
 APPEARANCE AND ODOR CLEAR OR CLOUDY RED LIQUIDS
 SECTION IV FIRE AND EXPLOSION HAZARD DATA
 FLASH POINT (METHOD USED) 53 DEG F (CLOSED CUP)
 FLAMMABLE LIMITS

LEL
 UEL
 2.0
 12.0

EXTINGUISHING MEDIA
DRY CHEMICAL OR CO2 EXTINGUISHER, WATER SPRAY
SPECIAL FIRE FIGHTING PROCEDURES
UNUSUAL FIRE AND EXPLOSION HAZARDS
CAN BE IGNITED AT ALMOST ALL TEMPERATURES.

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SECTION V HEALTH HAZARD DATA

THRESHOLD LIMIT VALUE

400 PPM

EFFECTS OF OVEREXPOSURE

INGESTION OR INHALATION OF VAPORS MAY CAUSE HEADACHE, DIZZINESS, NAUSEA.

EMERGENCY AND FIRST AID PROCEDURES

EYE CONTACT - IMMEDIATELY FLUSH THOROUGHLY WITH WATER, CONSULT A PHYSICIAN

EXTERNAL - WASH AFTER HANDLING

INTERNAL - IMMEDIATELY CALL A PHYSICIAN

SECTION VI REACTIVITY DATA

STABILITY

UNSTABLE

CONDITIONS TO AVOID

STABLE

X

HEAT, SOURCES OF IGNITION

INCOMPATIBILITY

N/A

HAZARDOUS DECOMPOSITION PRODUCTS

N/A

MAY OCCUR

CONDITIONS TO AVOID

HAZARDOUS

POLYMERIZATION

WILL NOT OCCUR

X

N/A

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED

ELIMINATE ALL SOURCES OF IGNITION AND FLAMMABLES. ABSORB ON PAPER. EVAPORATE

IN A HOOD. BURN THE PAPER.

WASTE DISPOSAL METHOD

ATOMIZE INTO AN INCINERATOR.

SECTION VIII SPECIAL PROTECTION INFORMATION

RESPIRATORY PROTECTION

NONE

VENTILATION

LOCAL EXHAUST

SPECIAL

MECHANICAL

FUME HOOD

PROTECTIVE GLOVES

EYE PROTECTION

GOGGLES

OTHER PROTECTIVE EQUIPMENT

LAB COAT

SECTION IX SPECIAL PRECAUTIONS

PRECAUTIONS TO BE TAKE IN HANDLING AND STORING

PROTECT AGAINST PHYSICAL DAMAGE. STORE AWAY FROM HEAT. AVOID PROLONGED OR

REPEATED CONTACT WITH SKIN OR CLOTHING. USE ADEQUATE VENTILATIONN

OTHER PRECAUTIONS

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