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SAFETY DATA SHEET

SECTION 1. CHEMICAL IDENTIFICATION

CATALOG #:	07213
NAME:	Chromium(VI) oxide
SYNONYMS:	Chromic anhydride
24 HOUR EMERGENCY TELEPHONE:	(800) 535-5053(USA) 352-323-3500 (INTERNATIONAL)
TO REQUEST AN MSDS:	(800) 869-9290
CUSTOMER SERVICE:	(630) 766-2112

SECTION 2. HAZARDS IDENTIFICATION

CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

GHS CLASSIFICATION IN ACCORDANCE WITH 29 CFR 1910 (OSHA HCS)

OXIDIZING SOLIDS (CATEGORY 1), H271

ACUTE TOXICITY, ORAL (CATEGORY 3), H301

ACUTE TOXICITY, INHALATION (CATEGORY 2), H330

ACUTE TOXICITY, DERMAL (CATEGORY 3), H311

SKIN CORROSION (CATEGORY 1A), H314

SERIOUS EYE DAMAGE (CATEGORY 1), H318
 RESPIRATORY SENSITISATION (CATEGORY 1), H334
 SKIN SENSITISATION (CATEGORY 1), H317
 GERM CELL MUTAGENICITY (CATEGORY 1B), H340
 CARCINOGENICITY (CATEGORY 1A), H350
 REPRODUCTIVE TOXICITY (CATEGORY 2), H361
 SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE, INHALATION
 (CATEGORY 1), H372
 ACUTE AQUATIC TOXICITY (CATEGORY 1), H400
 CHRONIC AQUATIC TOXICITY (CATEGORY 1), H410

FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE
 SECTION 16.

**GHS LABEL ELEMENTS, INCLUDING PRECAUTIONARY STATEMENTS
 PICTOGRAM**



SIGNAL WORD DANGER

HAZARD STATEMENT(S)

H271 MAY CAUSE FIRE OR EXPLOSION; STRONG OXIDISER.
 H301 + H311 TOXIC IF SWALLOWED OR IN CONTACT WITH SKIN
 H314 CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.
 H317 MAY CAUSE AN ALLERGIC SKIN REACTION.
 H318 CAUSES SERIOUS EYE DAMAGE.
 H330 FATAL IF INHALED.
 H334 MAY CAUSE ALLERGY OR ASTHMA SYMPTOMS OR
 BREATHING DIFFICULTIES IF INHALED.
 H340 MAY CAUSE GENETIC DEFECTS.
 H350 MAY CAUSE CANCER.
 H361 SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN
 CHILD.
 H372 CAUSES DAMAGE TO ORGANS THROUGH PROLONGED OR
 REPEATED EXPOSURE IF INHALED.
 H410 VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING
 EFFECTS.

PRECAUTIONARY STATEMENT(S)

P201 OBTAIN SPECIAL INSTRUCTIONS BEFORE USE.
 P202 DO NOT HANDLE UNTIL ALL SAFETY PRECAUTIONS HAVE
 BEEN READ AND UNDERSTOOD.
 P210 KEEP AWAY FROM HEAT.
 P220 KEEP/STORE AWAY FROM CLOTHING/ COMBUSTIBLE
 MATERIALS.
 P221 TAKE ANY PRECAUTION TO AVOID MIXING WITH
 COMBUSTIBLES.
 P260 DO NOT BREATHE DUST/ FUME/ GAS/ MIST/ VAPOURS/
 SPRAY.
 P264 WASH SKIN THOROUGHLY AFTER HANDLING.
 P270 DO NOT EAT, DRINK OR SMOKE WHEN USING THIS
 PRODUCT.
 P271 USE ONLY OUTDOORS OR IN A WELL-VENTILATED AREA.
 P272 CONTAMINATED WORK CLOTHING SHOULD NOT BE
 ALLOWED OUT OF THE WORKPLACE.

P273	AVOID RELEASE TO THE ENVIRONMENT.
P280	WEAR PROTECTIVE GLOVES/ PROTECTIVE CLOTHING/ EYE PROTECTION/ FACE PROTECTION.
P283	WEAR FIRE/ FLAME RESISTANT/ RETARDANT CLOTHING.
P284	WEAR RESPIRATORY PROTECTION.
P301 + P310 + P330	IF SWALLOWED: IMMEDIATELY CALL A POISON CENTER OR DOCTOR/ PHYSICIAN. RINSE MOUTH.
P301 + P330 + P331	IF SWALLOWED: RINSE MOUTH. DO NOT INDUCE VOMITING.
P303 + P361 + P353	IF ON SKIN (OR HAIR): TAKE OFF IMMEDIATELY ALL CONTAMINATED CLOTHING. RINSE SKIN WITH WATER/SHOWER.
P304 + P340 + P310	IF INHALED: REMOVE PERSON TO FRESH AIR AND KEEP COMFORTABLE FOR BREATHING. IMMEDIATELY CALL A POISON CENTER OR DOCTOR/ PHYSICIAN.
P305 + P351 + P338 + P310	IF IN EYES: RINSE CAUTIOUSLY WITH WATER FOR SEVERAL MINUTES. REMOVE CONTACT LENSES, IF PRESENT AND EASY TO DO. CONTINUE RINSING. IMMEDIATELY CALL A POISON CENTER OR DOCTOR/ PHYSICIAN.
P306 + P360	IF ON CLOTHING: RINSE IMMEDIATELY CONTAMINATED CLOTHING AND SKIN WITH PLENTY OF WATER BEFORE REMOVING CLOTHES.
P308 + P313	IF EXPOSED OR CONCERNED: GET MEDICAL ADVICE/ ATTENTION.
P333 + P313	IF SKIN IRRITATION OR RASH OCCURS: GET MEDICAL ADVICE/ ATTENTION.
P362	TAKE OFF CONTAMINATED CLOTHING AND WASH BEFORE REUSE.
P370 + P378	IN CASE OF FIRE: USE DRY SAND, DRY CHEMICAL OR ALCOHOL-RESISTANT FOAM TO EXTINGUISH.
P371 + P380 + P375	IN CASE OF MAJOR FIRE AND LARGE QUANTITIES: EVACUATE AREA. FIGHT FIRE REMOTELY DUE TO THE RISK OF EXPLOSION.
P391	COLLECT SPILLAGE.
P403 + P233	STORE IN A WELL-VENTILATED PLACE. KEEP CONTAINER TIGHTLY CLOSED.
P405	STORE LOCKED UP.
P501	DISPOSE OF CONTENTS/ CONTAINER TO AN APPROVED WASTE DISPOSAL PLANT.
HAZARDS NOT OTHERWISE CLASSIFIED (HNOC) OR NOT COVERED BY GHS	NONE

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

MF:	CrO ₃
MW:	99.99

CAS-NO. 1333-82-0

PURITY: $\geq 99.5\%$ (Assay)

HAZARDOUS COMPONENTS

COMPONENT	CLASSIFICATION	CONCENTRATION
CHROMIUM TRIOXIDE INCLUDED IN THE CANDIDATE LIST OF SUBSTANCES OF VERY HIGH CONCERN (SVHC) ACCORDING TO REGULATION (EC) NO. 1907/2006 (REACH)		
	OX. SOL. 1; ACUTE TOX. 3; ACUTE TOX. 2; ACUTE TOX. 3; SKIN CORR. 1A; EYE DAM. 1; RESP. SENS. 1; SKIN SENS. 1; MUTA.1B; CARC. 1A; REPR. 2; STOT RE 1; AQUATIC ACUTE 1; AQUATIC CHRONIC 1; H271, H301 + H311, H314, H317, H318, H330, H334, H340, H350, H361, H372, H410	$\leq 100\%$

FOR THE FULL TEXT OF THE H-STATEMENTS MENTIONED IN THIS SECTION, SEE SECTION 16.

SECTION 4. FIRST-AID MEASURES

DESCRIPTION OF FIRST AID MEASURES

GENERAL ADVICE	CONSULT A PHYSICIAN. SHOW THIS SAFETY DATA SHEET TO THE DOCTOR IN ATTENDANCE.MOVE OUT OF DANGEROUS AREA.
IF INHALED	IF BREATHED IN, MOVE PERSON INTO FRESH AIR. IF NOT BREATHING, GIVE ARTIFICIAL RESPIRATION. CONSULT A PHYSICIAN.
IN CASE OF SKIN CONTACT	TAKE OFF CONTAMINATED CLOTHING AND SHOES IMMEDIATELY. WASH OFF WITH SOAP AND PLENTY OF WATER. TAKE VICTIM IMMEDIATELY TO HOSPITAL. CONSULT A PHYSICIAN.
IN CASE OF EYE CONTACT	RINSE THOROUGHLY WITH PLENTY OF WATER FOR AT LEAST 15 MINUTES AND CONSULT A PHYSICIAN.CONTINUE RINSING EYES DURING TRANSPORT TO HOSPITAL.
IF SWALLOWED	DO NOT INDUCE VOMITING. NEVER GIVE ANYTHING BY MOUTH TO AN UNCONSCIOUS PERSON. RINSE MOUTH WITH WATER. CONSULT A PHYSICIAN.

MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED

THE MOST IMPORTANT KNOWN SYMPTOMS AND EFFECTS ARE DESCRIBED IN THE LABELLING (SEE SECTION 2.2) AND/OR IN SECTION 11

INDICATION OF ANY IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED

NO DATA AVAILABLE

SECTION 5. FIRE AND EXPLOSION DATA

EXTINGUISHING MEDIA

SUITABLE EXTINGUISHING MEDIA

USE WATER SPRAY, ALCOHOL-RESISTANT FOAM, DRY CHEMICAL OR CARBON DIOXIDE.

SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

CHROMIUM OXIDES

ADVICE FOR FIREFIGHTERS

WEAR SELF-CONTAINED BREATHING APPARATUS FOR FIREFIGHTING IF NECESSARY.

FURTHER INFORMATION

USE WATER SPRAY TO COOL UNOPENED CONTAINERS.

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES

WEAR RESPIRATORY PROTECTION. AVOID DUST FORMATION. AVOID BREATHING VAPOURS, MIST OR GAS. ENSURE ADEQUATE VENTILATION. EVACUATE PERSONNEL TO SAFE AREAS. AVOID BREATHING DUST. FOR PERSONAL PROTECTION SEE SECTION 8.

ENVIRONMENTAL PRECAUTIONS

PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. DO NOT LET PRODUCT ENTER DRAINS. DISCHARGE INTO THE ENVIRONMENT MUST BE AVOIDED.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

SWEEP UP AND SHOVEL. CONTAIN SPILLAGE, AND THEN COLLECT WITH AN ELECTRICALLY PROTECTED VACUUM CLEANER OR BY WET- BRUSHING AND PLACE IN CONTAINER FOR DISPOSAL ACCORDING TO LOCAL REGULATIONS (SEE SECTION 13). KEEP IN SUITABLE, CLOSED CONTAINERS FOR DISPOSAL.

REFERENCE TO OTHER SECTIONS FOR DISPOSAL SEE SECTION 13.

SECTION 7. HANDLING AND STORAGE

PRECAUTIONS FOR SAFE HANDLING AVOID CONTACT WITH SKIN AND EYES. AVOID FORMATION OF DUST AND AEROSOLS.FURTHER PROCESSING OF SOLID MATERIALS MAY RESULT IN THE FORMATION OF COMBUSTIBLE DUSTS. THE POTENTIAL FOR COMBUSTIBLE DUST FORMATION SHOULD BE TAKEN INTO CONSIDERATION BEFORE ADDITIONAL PROCESSING OCCURS.
PROVIDE APPROPRIATE EXHAUST VENTILATION AT PLACES WHERE DUST IS FORMED.KEEP AWAY FROM SOURCES OF IGNITION - NO SMOKING.
FOR PRECAUTIONS SEE SECTION 2.2.

CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES KEEP CONTAINER TIGHTLY CLOSED IN A DRY AND WELL-VENTILATED PLACE.
HYGROSCOPIC HEAT SENSITIVE.
STORAGE CLASS (TRGS 510): STRONGLY OXIDIZING HAZARDOUS MATERIALS

SPECIFIC END USE(S) APART FROM THE USES MENTIONED IN SECTION 1.2
NO OTHER SPECIFIC USES ARE STIPULATED

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

CONTROL PARAMETERS

COMPONENTS WITH WORKPLACE CONTROL PARAMETERS

COMPONENT	CAS-NO.	VALUE	CONTROL PARAMETERS	BASIS
CHROMIUM TRIOXIDE	1333-82-0	TWA	0.001000 MG/M3	USA. NIOSH RECOMMENDED EXPOSURE LIMITS

	REMARKS	POTENTIAL OCCUPATIONAL CARCINOGEN SEE APPENDIX C SEE APPENDIX A SEE TABLE Z-2 FOR THE EXPOSURE LIMIT FOR ANY OPERATIONS OR SECTORS WHERE THE EXPOSURE LIMIT IN 1910.1026 IS STAYED OR IS OTHERWISE NOT IN EFFECT SUBSTANCE LISTED; FOR MORE INFORMATION SEE OSHA DOCUMENT 1910.1026		
		TWA	0.050000 MG/M3	USA. ACGIH THRESHOLD LIMIT VALUES (TLV)
		UPPER RESPIRATORY TRACT IRRITATION CANCER SUBSTANCES FOR WHICH THERE IS A BIOLOGICAL EXPOSURE INDEX OR INDICES (SEE BEI SECTION) CONFIRMED HUMAN CARCINOGEN VARIES		
		PEL	0.005000 MG/M3	OSHA SPECIFICALLY REGULATED CHEMICALS/CARCINOGENS
		1910.1026 THIS STANDARD APPLIES TO OCCUPATIONAL EXPOSURES TO CHROMIUM (VI) IN ALL FORMS AND COMPOUNDS IN GENERAL INDUSTRY, EXCEPT: (A) EXPOSURES THAT OCCUR IN THE APPLICATION OF PESTICIDES REGULATED BY THE ENVIRONMENTAL PROTECTION AGENCY OR ANOTHER FEDERAL GOVERNMENT AGENCY (E.G., THE TREATMENT OF WOOD WITH PRESERVATIVES); (B) EXPOSURES TO PORTLAND CEMENT; OR (C) WHERE THE EMPLOYER HAS OBJECTIVE DATA DEMONSTRATING THAT A MATERIAL CONTAINING CHROMIUM OR A SPECIFIC PROCESS, OPERATION, OR ACTIVITY INVOLVING CHROMIUM CANNOT RELEASE DUSTS, FUMES, OR MISTS OF CHROMIUM (VI) IN CONCENTRATIONS AT OR ABOVE 0.5 MGM/M3 AS AN 8-HOUR TIME-WEIGHTED AVERAGE (TWA) UNDER ANY EXPECTED CONDITIONS OF USE. CHROMIUM (VI) [HEXAVALENT CHROMIUM OR CR(VI)] MEANS CHROMIUM WITH A VALENCE OF POSITIVE SIX, IN ANY FORM AND IN ANY COMPOUND OSHA SPECIFICALLY REGULATED CARCINOGEN		
		TWA	0.000200 MG/M3	USA. NIOSH RECOMMENDED EXPOSURE LIMITS

		POTENTIAL OCCUPATIONAL CARCINOGEN SEE APPENDIX C SEE APPENDIX A
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BIOLOGICAL OCCUPATIONAL EXPOSURE LIMITS

COMPONENT	CAS-NO.	PARAMETERS	VALUE	BIOLOGICAL SPECIMEN	BASIS
CHROMIUM TRIOXIDE	1333-82-0	TOTAL CHROMIUM	25.0000 MG/L	URINE	ACGIH - BIOLOGICAL EXPOSURE INDICES (BEI)
	REMARKS	END OF SHIFT AT END OF WORKWEEK			
		TOTAL CHROMIUM	10.0000 MG/L	URINE	ACGIH - BIOLOGICAL EXPOSURE INDICES (BEI)
		INCREASE DURING SHIFT			
		TOTAL CHROMIUM	25 MG/L	URINE	ACGIH - BIOLOGICAL EXPOSURE INDICES (BEI)
		END OF SHIFT AT END OF WORKWEEK			
		TOTAL CHROMIUM	10 MG/L	URINE	ACGIH - BIOLOGICAL EXPOSURE INDICES (BEI)
		INCREASE DURING SHIFT			

EXPOSURE CONTROLS

APPROPRIATE ENGINEERING CONTROLS

AVOID CONTACT WITH SKIN, EYES AND CLOTHING. WASH HANDS BEFORE BREAKS AND IMMEDIATELY AFTER HANDLING THE PRODUCT.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION

FACE SHIELD AND SAFETY GLASSES USE EQUIPMENT FOR EYE PROTECTION TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR EN 166(EU).

SKIN PROTECTION	<p>HANDLE WITH GLOVES. GLOVES MUST BE INSPECTED PRIOR TO USE. USE PROPER GLOVE REMOVAL TECHNIQUE (WITHOUT TOUCHING GLOVE'S OUTER SURFACE) TO AVOID SKIN CONTACT WITH THIS PRODUCT. DISPOSE OF CONTAMINATED GLOVES AFTER USE IN ACCORDANCE WITH APPLICABLE LAWS AND GOOD LABORATORY PRACTICES. WASH AND DRY HANDS.</p> <p>FULL CONTACT MATERIAL: NITRILE RUBBER MINIMUM LAYER THICKNESS: 0.11 MM BREAK THROUGH TIME: 480 MIN MATERIAL TESTED:DERMATRIL (KCL 740, SIZE M)</p> <p>SPLASH CONTACT MATERIAL: NITRILE RUBBER MINIMUM LAYER THICKNESS: 0.11 MM BREAK THROUGH TIME: 480 MIN MATERIAL TESTED:DERMATRIL (KCL 740, SIZE M)</p> <p>IF USED IN SOLUTION, OR MIXED WITH OTHER SUBSTANCES, AND UNDER CONDITIONS WHICH DIFFER FROM EN 374, CONTACT THE SUPPLIER OF THE CE APPROVED GLOVES. THIS RECOMMENDATION IS ADVISORY ONLY AND MUST BE EVALUATED BY AN INDUSTRIAL HYGIENIST AND SAFETY OFFICER FAMILIAR WITH THE SPECIFIC SITUATION OF ANTICIPATED USE BY OUR CUSTOMERS. IT SHOULD NOT BE CONSTRUED AS OFFERING AN APPROVAL FOR ANY SPECIFIC USE SCENARIO.</p>
BODY PROTECTION	<p>COMPLETE SUIT PROTECTING AGAINST CHEMICALS, THE TYPE OF PROTECTIVE EQUIPMENT MUST BE SELECTED ACCORDING TO THE CONCENTRATION AND AMOUNT OF THE DANGEROUS SUBSTANCE AT THE SPECIFIC WORKPLACE.</p>
RESPIRATORY PROTECTION	<p>WHERE RISK ASSESSMENT SHOWS AIR-PURIFYING RESPIRATORS ARE APPROPRIATE USE A FULL-FACE PARTICLE RESPIRATOR TYPE N100 (US) OR TYPE P3 (EN 143) RESPIRATOR CARTRIDGES AS A BACKUP TO ENGINEERING CONTROLS. IF THE RESPIRATOR IS THE SOLE MEANS OF PROTECTION, USE A FULL-FACE SUPPLIED AIR RESPIRATOR. USE RESPIRATORS AND COMPONENTS TESTED AND APPROVED UNDER APPROPRIATE GOVERNMENT STANDARDS SUCH AS NIOSH (US) OR CEN (EU).</p>
CONTROL OF ENVIRONMENTAL EXPOSURE	<p>PREVENT FURTHER LEAKAGE OR SPILLAGE IF SAFE TO DO SO. DO NOT LET PRODUCT ENTER DRAINS. DISCHARGE INTO THE ENVIRONMENT MUST BE AVOIDED.</p>

SECTION 9. **PHYSICAL AND CHEMICAL PROPERTIES**

INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE	Brick red flakes
ODOUR	NO DATA AVAILABLE
ODOUR THRESHOLD	NO DATA AVAILABLE
PH	NO DATA AVAILABLE
MELTING POINT/FREEZING POINT	
INITIAL BOILING POINT AND BOILING RANGE	
FLASH POINT	
EVAPORATION RATE	NO DATA AVAILABLE
FLAMMABILITY (SOLID, GAS)	NO DATA AVAILABLE
UPPER/LOWER FLAMMABILITY OR EXPLOSIVE LIMITS	NO DATA AVAILABLE
VAPOUR PRESSURE	NO DATA AVAILABLE
VAPOUR DENSITY	NO DATA AVAILABLE
RELATIVE DENSITY	2.70 (Lit.)
WATER SOLUBILITY	1.667 G/L - SOLUBLE
PARTITION COEFFICIENT: N- OCTANOL/WATER	NO DATA AVAILABLE
AUTO-IGNITION TEMPERATURE	NO DATA AVAILABLE
DECOMPOSITION TEMPERATURE	NO DATA AVAILABLE
VISCOSITY	NO DATA AVAILABLE
EXPLOSIVE PROPERTIES	NO DATA AVAILABLE
OXIDIZING PROPERTIES	THE SUBSTANCE OR MIXTURE IS CLASSIFIED AS OXIDIZING WITH THE CATEGORY 1.
OTHER SAFETY INFORMATION	NO DATA AVAILABLE

SECTION 10. STABILITY AND REACTIVITY

REACTIVITY	NO DATA AVAILABLE
CHEMICAL STABILITY	STABLE UNDER RECOMMENDED STORAGE CONDITIONS.
POSSIBILITY OF HAZARDOUS REACTIONS	NO DATA AVAILABLE
CONDITIONS TO AVOID	HEAT AVOID MOISTURE.
INCOMPATIBLE MATERIALS	ORGANIC MATERIALS, PHOSPHORUS, POWDERED METALS

**HAZARDOUS
DECOMPOSITION
PRODUCTS**

OTHER DECOMPOSITION PRODUCTS - NO DATA
AVAILABLE
IN THE EVENT OF FIRE: SEE SECTION 5

SECTION 11. TOXICOLOGICAL INFORMATION

INFORMATION ON TOXICOLOGICAL EFFECTS

ACUTE TOXICITY	LD50 ORAL - RAT - MALE AND FEMALE - 52 MG/KG (OECD TEST GUIDELINE 401) LC50 INHALATION - RAT - MALE - 4 H - 217 MG/M3 LD50 DERMAL - RABBIT - MALE AND FEMALE - 57 MG/KG (OECD TEST GUIDELINE 402)
SKIN CORROSION/IRRITATION	SKIN - RABBIT RESULT: CORROSIVE - 24 H
SERIOUS EYE DAMAGE/EYE IRRITATION	EYES - RABBIT RESULT: CORROSIVE TO EYES
RESPIRATORY OR SKIN SENSITISATION	NO DATA AVAILABLE
GERM CELL MUTAGENICITY	MAY ALTER GENETIC MATERIAL. IN VIVO TESTS SHOWED MUTAGENIC EFFECTS
CARCINOGENICITY	THIS IS OR CONTAINS A COMPONENT THAT HAS BEEN REPORTED TO BE CARCINOGENIC BASED ON ITS IARC, OSHA, ACGIH, NTP, OR EPA CLASSIFICATION. HUMAN CARCINOGEN.
IARC:	1 - GROUP 1: CARCINOGENIC TO HUMANS (CHROMIUM TRIOXIDE) NTP:
NTP:	KNOWN TO BE HUMAN CARCINOGEN (CHROMIUM TRIOXIDE)
OSHA:	OSHA SPECIFICALLY REGULATED CARCINOGEN (CHROMIUM TRIOXIDE)
REPRODUCTIVE TOXICITY	SUSPECTED HUMAN REPRODUCTIVE TOXICANT MAY CAUSE REPRODUCTIVE DISORDERS.
SPECIFIC TARGET ORGAN TOXICITY - SINGLE EXPOSURE	NO DATA AVAILABLE
SPECIFIC TARGET ORGAN TOXICITY - REPEATED EXPOSURE	NO DATA AVAILABLE
ASPIRATION HAZARD	NO DATA AVAILABLE

**ADDITIONAL
INFORMATION**

RTECS: GB6650000
MATERIAL IS EXTREMELY DESTRUCTIVE TO TISSUE
OF THE MUCOUS MEMBRANES AND UPPER
RESPIRATORY TRACT, EYES, AND SKIN., COUGH,
SHORTNESS OF BREATH, HEADACHE, NAUSEA
STOMACH - IRREGULARITIES - BASED ON HUMAN
EVIDENCE

SECTION 12. ECOLOGICAL INFORMATION

TOXICITY**TOXICITY TO FISH**

LC50 - TILAPIA MOSSAMBICA - 21.05 - 141.38 MG/L -
96.0 H

LC0 - LEUCISCUS IDUS (GOLDEN ORFE) - 100 MG/L -
48.0 H

**TOXICITY TO DAPHNIA AND
OTHER AQUATIC
INVERTEBRATES**

EC50 - DAPHNIA MAGNA (WATER FLEA) - 0.8 MG/L - 48
H

**PERSISTENCE AND
DEGRADABILITY**

NO DATA AVAILABLE

**BIOACCUMULATIVE
POTENTIAL**

NO DATA AVAILABLE

MOBILITY IN SOIL

NO DATA AVAILABLE

**RESULTS OF PBT AND
VPVB ASSESSMENT**

PBT/VPVB ASSESSMENT NOT AVAILABLE AS
CHEMICAL SAFETY ASSESSMENT NOT
REQUIRED/NOT CONDUCTED

OTHER ADVERSE EFFECTS

AN ENVIRONMENTAL HAZARD CANNOT BE
EXCLUDED IN THE EVENT OF UNPROFESSIONAL
HANDLING OR DISPOSAL.
VERY TOXIC TO AQUATIC LIFE WITH LONG LASTING
EFFECTS.

SECTION 13. DISPOSAL CONSIDERATIONS

WASTE TREATMENT METHODS

PRODUCT	BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER BUT EXERT EXTRA CARE IN IGNITING AS THIS MATERIAL IS HIGHLY FLAMMABLE. OFFER SURPLUS AND NON-RECYCLABLE SOLUTIONS TO A LICENSED DISPOSAL COMPANY. CONTACT A LICENSED PROFESSIONAL WASTE DISPOSAL SERVICE TO DISPOSE OF THIS MATERIAL. DISSOLVE OR MIX THE MATERIAL WITH A COMBUSTIBLE SOLVENT AND BURN IN A CHEMICAL INCINERATOR EQUIPPED WITH AN AFTERBURNER AND SCRUBBER.
CONTAMINATED PACKAGING	DISPOSE OF AS UNUSED PRODUCT.

SECTION 14. **TRANSPORT INFORMATION**

DOT (US)

PROPER SHIPPING NAME:	CHROMIUM TRIOXIDE, ANHYDROUS
UN NUMBER:	1463
CLASS:	5.1 (6.1, 8)
PACKING GROUP:	II
REPORTABLE QUANTITY (RQ):	
POISON INHALATION HAZARD:	NO

IMDG

PROPER SHIPPING NAME:	CHROMIUM TRIOXIDE, ANHYDROUS
UN NUMBER:	1463
CLASS:	5.1 (6.1, 8)
PACKING GROUP:	II
EMS-NO:	F-A, S-Q
MARINE POLLUTANT:	YES

IATA

PROPER SHIPPING NAME:	CHROMIUM TRIOXIDE, ANHYDROUS
UN NUMBER:	1463
CLASS:	5.1 (6.1, 8)
PACKING GROUP:	II

SECTION 15. **REGULATORY INFORMATION**

SARA 302 COMPONENTS	NO CHEMICALS IN THIS MATERIAL ARE SUBJECT TO THE REPORTING REQUIREMENTS OF SARA TITLE III, SECTION 302.
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SARA 313 COMPONENTS THE FOLLOWING COMPONENTS ARE SUBJECT TO REPORTING LEVELS ESTABLISHED BY SARA TITLE III, SECTION 313:

	CAS-NO.	REVISION DATE
Chromium(VI) oxide	1333-82-0	4/24/1993

SARA 311/312 HAZARDS REACTIVITY HAZARD, ACUTE HEALTH HAZARD, CHRONIC HEALTH HAZARD

MASSACHUSETTS RIGHT TO KNOW COMPONENTS

	CAS-NO.	REVISION DATE
Chromium(VI) oxide	1333-82-0	4/24/1993

PENNSYLVANIA RIGHT TO KNOW COMPONENTS

	CAS-NO.	REVISION DATE
Chromium(VI) oxide	1333-82-0	4/24/1993

NEW JERSEY RIGHT TO KNOW COMPONENTS

	CAS-NO.	REVISION DATE
Chromium(VI) oxide	1333-82-0	4/24/1993

CALIFORNIA PROP. 65 COMPONENTS WARNING! THIS PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

	CAS-NO.	REVISION DATE
Chromium(VI) oxide	1333-82-0	6/6/2014

WARNING: THIS PRODUCT CONTAINS A CHEMICAL KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

	CAS-NO.	REVISION DATE
Chromium(VI) oxide	1333-82-0	6/6/2014

SECTION 16. OTHER INFORMATION

FULL TEXT OF H-STATEMENTS REFERRED TO UNDER SECTIONS 2 AND 3.

ACUTE TOX.	ACUTE TOXICITY
AQUATIC ACUTE	ACUTE AQUATIC TOXICITY
AQUATIC CHRONIC	CHRONIC AQUATIC TOXICITY
CARC.	CARCINOGENICITY
EYE DAM.	SERIOUS EYE DAMAGE
H271	MAY CAUSE FIRE OR EXPLOSION; STRONG OXIDISER.
H301	TOXIC IF SWALLOWED.
H301 + H311	TOXIC IF SWALLOWED OR IN CONTACT WITH SKIN
H311	TOXIC IN CONTACT WITH SKIN.
H314	CAUSES SEVERE SKIN BURNS AND EYE DAMAGE.
H317	MAY CAUSE AN ALLERGIC SKIN REACTION.
H318	CAUSES SERIOUS EYE DAMAGE.
H330	FATAL IF INHALED.
H334	MAY CAUSE ALLERGY OR ASTHMA SYMPTOMS OR BREATHING DIFFICULTIES IF INHALED.
H340	MAY CAUSE GENETIC DEFECTS.

H350	MAY CAUSE CANCER.
H361	SUSPECTED OF DAMAGING FERTILITY OR THE UNBORN CHILD.
H372	CAUSES DAMAGE TO ORGANS THROUGH PROLONGED OR REPEATED EXPOSURE IF INHALED.
H400	VERY TOXIC TO AQUATIC LIFE.

HMIS RATING

HEALTH HAZARD:	4
CHRONIC HEALTH HAZARD:	*
FLAMMABILITY:	0
PHYSICAL HAZARD	2

NFPA RATING

HEALTH HAZARD:	4
FIRE HAZARD:	0
REACTIVITY HAZARD:	2
SPECIAL HAZARD.I:	OX

MSDS LEGEND

MW:	MOLECULAR WEIGHT
MF:	MOLECULAR FORMULA
VOC:	VOLATILE ORGANIC COMPOUNDS
ACGIH:	AMERICAN CONFERENCE OF GOVERNMENTAL INDUSTRIAL HYGIENISTS
CAS:	CHEMICAL ABSTRACTS SERVICE REGISTRY NUMBER
OSHA:	OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION
PEL:	PERMISSIBLE EXPOSURE LIMIT (OSHA)
TLV:	THRESHOLD LIMIT VALUE (ACGIH)

IMPORTANT:

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