SECTION-1: Identification of the substance / mixture and the company / undertaking

Catalogue Number	CS-CG-00058
Product Name	Potassium chromate, ACS
CAS No.	7789-00-6
Category	Intermediate
Synonyms	Not available
Brand	Clearsynth Labs Ltd.
Identified uses	Laboratory Chemicals
Uses advised against	Not available
Company	Clearsynth Labs Ltd. Mumbai, India
Emergency Phone #	+91-22-245045900
REACH No.	Not available

SECTION 2: Hazards identification

Disclaimer: This is sample MSDS. Please email **sales@clearsynth.com** for more details.

2.1 Classification of the substance or mixture-Regulation (EC) No 1272/2008:

Skin irritation (Category 2)
Serious eye damage/eye irritation (Category 2)
Acute toxicity (Category 4)

2.2 Label Elements

Signal Word: Warning

Hazard Statement(s)

Code	Statement
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.

H319	Causes serious eye irritation.
H335	Not available
H340	Not available
H400	Not available
H410	Not available
H301	Not available
H330	Not available
H350	Not available
H372	Not available
H314	Not available
H318	Causes serious eye damage.
H334	Not available
H360	Not available
H370	Not available
H341	Not available
H312	Harmful in contact with skin.

Precautionary Statement(s)

Code	Statement
P203	Not available
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling.
P264+P265	Not available
P271	Use only outdoors or in a well-ventilated area.
P272	Not available
P273	Not available
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if presen

P318	Not available
P319	Get medical help if you feel unwell.
P321	Specific treatment (see … on this label).
P332+P317	If skin irritation occurs: Get medical help.
P333+P317	Not available
P337+P317	If eye irritation persists: Get medical help.
P362+P364	Take off contaminated clothing and wash it before reuse.
P391	Not available
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national/international regulatio
P260	Not available
P270	Not available
P284	Not available
P301+P316	Not available
P316	Not available
P320	Not available
P330	Not available
P233	Not available
P301+P330+P331	Not available
P302+P361+P354	Not available
P305+P354+P338	Not available
P308+P316	Not available
P317	Not available
P342+P316	Not available
P363	Not available
P403	Not available

SECTION 3: Composition / information on ingredients

3.1 Substance

Component : Potassium chromate, ACS
CAS Number : 7789-00-6
Molecular Formula : -
Molecular Weight : -
Parent Chemical : -
Synonyms : Not available
Concentration : Not available

SECTION 4: First aid measures

SECTION 4: First-aid measures

4.1 Description of first aid measures
General advice: Seek medical attention immediately. Show this SDS to the physician. Remove contaminated clothing and shoes.
Inhalation: Move person to fresh air. Keep at rest in a position comfortable for breathing. If breathing is difficult, seek medical attention immediately.
Skin contact: Wash immediately with plenty of water and soap. Seek medical attention.
Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Seek medical attention immediately.
Ingestion: Rinse mouth. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Seek medical attention immediately.

4.2 Most important symptoms and effects, both acute and delayed
May cause irritation and/or burns to eyes, skin, and respiratory tract. Additional symptoms/effects: Not available.

4.3 Indication of any immediate medical attention and special treatment needed
Treat symptomatically. Specific antidote: Not available.

SECTION 5: Firefighting measures

SECTION 5: Fire-fighting measures

5.1 Extinguishing media
Suitable extinguishing media: Use extinguishing measures appropriate to surrounding fire (e.g., water spray, dry chemical, foam, carbon dioxide).
Unsuitable extinguishing media: Not available.

5.2 Special hazards arising from the substance or mixture
Oxidizing solid; may intensify fire. Thermal decomposition may release hazardous fumes/oxides of chromium and potassium compounds. Specific hazardous combustion products: Not available.

5.3 Advice for firefighters
Wear self-contained breathing apparatus (SCBA) and full protective gear. Avoid inhalation of fumes and dust. Use water spray to cool containers exposed to fire. Prevent fire-fighting water from entering drains or waterways.

SECTION 6: Accidental release measures

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Evacuate unnecessary personnel. Avoid breathing dust. Avoid contact with skin and eyes. Provide adequate ventilation. Wear appropriate personal protective equipment (see Section 8).

6.2 Environmental precautions
Avoid release to the environment. Prevent entry into drains, surface water, and soil. Notify authorities if significant contamination occurs.

6.3 Methods and material for containment and cleaning up
Avoid generating dust. Collect spillage using non-sparking tools and place in a suitable, labeled container for disposal. Clean contaminated area with water after material pickup, if appropriate. Do not allow washings to enter drains.

6.4 Reference to other sections
See Section 8 for exposure controls/personal protection and Section 13 for disposal considerations.

SECTION-7: Handling and storage

SECTION 7: Handling and storage

7.1 Precautions for safe handling
Handle in accordance with good industrial hygiene and safety practice. Avoid formation of dust and aerosols. Avoid contact with skin, eyes, and clothing. Do not breathe dust. Use only with adequate ventilation. Wash thoroughly after handling. Do not eat, drink, or smoke when using this product.

7.2 Conditions for safe storage, including any incompatibilities
Store in a tightly closed container in a cool, dry, well-ventilated place. Protect from moisture. Keep away from heat and sources of ignition. Store away from incompatible materials.
Incompatibilities: Reducing agents, combustible/organic materials, strong acids, and other incompatible substances: Not available.

7.3 Specific end use(s)
Not available.

SECTION 8: Exposure controls / personal protection

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Occupational exposure limits: Not available.
Biological limit values: Not available.

8.2 Exposure controls
Engineering controls: Use local exhaust ventilation or other engineering controls to maintain airborne levels below applicable exposure limits. If exposure limits are not available, minimize exposure as low as reasonably achievable.
Personal protective equipment (PPE):
- Eye/face protection: Safety glasses with side shields or chemical splash goggles.
- Skin protection: Chemical-resistant gloves; protective clothing as appropriate.
- Respiratory protection: If dust is generated or ventilation is inadequate, use a properly fitted, approved particulate respirator as appropriate.

- Hygiene measures: Wash hands and exposed skin after handling. Remove contaminated clothing and wash before reuse.
Environmental exposure controls: Avoid uncontrolled release to the environment.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Test	Result
Appearance	No data available
IR spectrum	No data available
pH	No data available
Solubility	No data available

Property	Value
a) Physical State	No data available
b) Color	No data available
c) Odor	No data available
d) pH	No data available
e) Vapour Pressure	No data available
f) Viscosity	No data available
g) Initial Boiling Point and boiling range	No data available
h) Melting Point / Freezing Point	No data available
i) Auto Ignition Temperature	No data available
j) Flash Point	No data available
k) Explosion Limit, Lower	No data available
l) Explosion Limit, Upper	No data available
m) Decomposition Temperature	No data available
n) Loss on Drying	No data available
o) Relative Density	No data available
p) Solubility (in DMSO)	No data available

Property	Value
q) Oxidizing Properties	No data available

SECTION 10: Stability and reactivity

SECTION 10: Stability and reactivity

10.1 Reactivity
Oxidizing solid; may react with reducing agents and combustible materials. Further reactivity data: Not available.

10.2 Chemical stability
Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions
May intensify fire; oxidizer. Hazardous reactions with incompatible materials: Not available.

10.4 Conditions to avoid
Heat, moisture, contamination, dust generation, and contact with incompatible materials.

10.5 Incompatible materials
Reducing agents; combustible/organic materials; strong acids; other incompatibilities: Not available.

10.6 Hazardous decomposition products
Chromium oxides and other metal oxide fumes; additional decomposition products: Not available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
- Acute toxicity: IDENTIFICATION AND USE: Potassium chromate forms lemon-yellow crystals. It has a limited application in enamels, finishing leather, and rustproofing of metals. Oxidizing agent in analytical chemistry. HUMAN EXPOSURE AND TOXICITY: If ingested, violent gastroenteritis, severe circulatory collapse and toxic nephritis may ensue, or peripheral vascular shock. Eye contact can cause severe damage with possible loss of vision. Evaluation of genotoxic effects of potassium chromate (K2CrO4) and was carried out in human blood lymphocytes in vitro as measured by the electron microscopy in situ end-labeling (EM-ISEL). EM-ISEL was used to assess DNA single-strand breaks (SSBs) expressed as number of immunogold particles per sq um of chromatin at both chromosomal and nuclear DNA levels. Quantification of SSBs by EM-ISEL showed that potassium chromate is genotoxic agent at non-cytotoxic concentrations. Potassium chromate quadrupled frequency of sister-chromatid exchanges in cultured human fibroblasts. Potassium chromate induced DNA damage and unscheduled DNA synthesis in cultured human fibroblasts. ANIMAL STUDIES: The embryotoxic and teratogenic potential of potassium chromate was evaluated by the teratological analysis of mouse fetuses. The test chemical was administered intraperitoneally to mice of both sexes for 30 days. Teratological scanning of the fetuses born to treated animals revealed a reduction in the number of live implants and litter size. Higher incidence of resorption and dead litter indicated the embryotoxic effect of the test chemical. Malformations, both skeletal and morphological, suggest the possibility of potassium chromate being fetotoxic. Potassium chromate induced significant and dose-related increase in micronucleated polychromatic erythrocytes (micronuclei) in bone marrow of mice following 2 ip injections of doses ranging from 12-48 mg/kg body wt. Potassium chromate was tested for its potential to induce forward mutations at the thymidine kinase locus in L5178Y mouse lymphoma cells. Strong positive responses at survivals greater than 10% were observed. ECOTOXICITY STUDIES: 90 Days after hatching, young carp were reared for 75 wk in test waters of pH 7 & 5 containing 0.1 ppm potassium chromate. This pollutant caused deformation in the bone by

chronic leaching of calcium, and the low pH hastened the leaching. Hexavalent chromium's carcinogenic effects are caused by its metabolites, pentavalent and trivalent chromium. The DNA damage may be caused by hydroxyl radicals produced during reoxidation of pentavalent chromium by hydrogen peroxide molecules present in the cell. Trivalent chromium may also form complexes with peptides, proteins, and DNA, resulting in DNA-protein crosslinks, DNA strand breaks, DNA-DNA interstrand crosslinks, chromium-DNA adducts, chromosomal aberrations and alterations in cellular signaling pathways. It has been shown to induce carcinogenesis by overstimulating cellular regulatory pathways and increasing peroxide levels by activating certain mitogen-activated protein kinases. It can also cause transcriptional repression by cross-linking histone deacetylase 1-DNA methyltransferase 1 complexes to CYP1A1 promoter chromatin, inhibiting histone modification. Chromium may increase its own toxicity by modifying metal regulatory transcription factor 1, causing the inhibition of zinc-induced metallothionein transcription. (A12, L16, A34, A35, A36)
- Skin corrosion/irritation: No data available.
- Serious eye damage/eye irritation: No data available.
- Respiratory or skin sensitization: No data available.
- Germ cell mutagenicity: IDENTIFICATION AND USE: Potassium chromate forms lemon-yellow crystals. It has a limited application in enamels, finishing leather, and rustproofing of metals. Oxidizing agent in analytical chemistry. HUMAN EXPOSURE AND TOXICITY: If ingested, violent gastroenteritis, severe circulatory collapse and toxic nephritis may ensue, or peripheral vascular shock. Eye contact can cause severe damage with possible loss of vision. Evaluation of genotoxic effects of potassium chromate (K2CrO4) and was carried out in human blood lymphocytes in vitro as measured by the electron microscopy in situ end-labeling (EM-ISEL). EM-ISEL was used to assess DNA single-strand breaks (SSBs) expressed as number of immunogold particles per sq um of chromatin at both chromosomal and nuclear DNA levels. Quantification of SSBs by EM-ISEL showed that potassium chromate is genotoxic agent at non-cytotoxic concentrations. Potassium chromate quadrupled frequency of sister-chromatid exchanges in cultured human fibroblasts. Potassium chromate induced DNA damage and unscheduled DNA synthesis in cultured human fibroblasts. ANIMAL STUDIES: The embryotoxic and teratogenic potential of potassium chromate was evaluated by the teratological analysis of mouse fetuses. The test chemical was administered intraperitoneally to mice of both sexes for 30 days. Teratological scanning of the fetuses born to treated animals revealed a reduction in the number of live implants and litter size. Higher incidence of resorption and dead litter indicated the embryotoxic effect of the test chemical. Malformations, both skeletal and morphological, suggest the possibility of potassium chromate being fetotoxic. Potassium chromate induced significant and dose-related increase in micronucleated polychromatic erythrocytes (micronuclei) in bone marrow of mice following 2 ip injections of doses ranging from 12-48 mg/kg body wt. Potassium chromate was tested for its potential to induce forward mutations at the thymidine kinase locus in L5178Y mouse lymphoma cells. Strong positive responses at survivals greater than 10% were observed. ECOTOXICITY STUDIES: 90 Days after hatching, young carp were reared for 75 wk in test waters of pH 7 & 5 containing 0.1 ppm potassium chromate. This pollutant caused deformation in the bone by chronic leaching of calcium, and the low pH hastened the leaching. Hexavalent chromium's carcinogenic effects are caused by its metabolites, pentavalent and trivalent chromium. The DNA damage may be caused by hydroxyl radicals produced during reoxidation of pentavalent chromium by hydrogen peroxide molecules present in the cell. Trivalent chromium may also form complexes with peptides, proteins, and DNA, resulting in DNA-protein crosslinks, DNA strand breaks, DNA-DNA interstrand crosslinks, chromium-DNA adducts, chromosomal aberrations and alterations in cellular signaling pathways. It has been shown to induce carcinogenesis by overstimulating cellular regulatory pathways and increasing peroxide levels by activating certain mitogen-activated protein kinases. It can also cause transcriptional repression by cross-linking histone deacetylase 1-DNA methyltransferase 1 complexes to CYP1A1 promoter chromatin, inhibiting histone modification. Chromium may increase its own toxicity by modifying metal regulatory transcription factor 1, causing the inhibition of zinc-induced metallothionein transcription. (A12, L16, A34, A35, A36)

- Carcinogenicity: Hexavalent chromium's carcinogenic effects are caused by its metabolites, pentavalent and trivalent chromium. The DNA damage may be caused by hydroxyl radicals produced during reoxidation of pentavalent chromium by hydrogen peroxide molecules present in the cell. Trivalent chromium may also form complexes with peptides, proteins, and DNA, resulting in DNA-protein crosslinks, DNA strand breaks, DNA-DNA interstrand crosslinks, chromium-DNA adducts, chromosomal aberrations and alterations in cellular signaling pathways. It has been shown to induce carcinogenesis by overstimulating cellular regulatory pathways and increasing peroxide levels by activating certain mitogen-activated protein kinases. It can also cause transcriptional repression by cross-linking histone deacetylase 1-DNA methyltransferase 1 complexes to CYP1A1 promoter chromatin, inhibiting histone modification. Chromium may increase its own toxicity by modifying metal regulatory transcription factor 1, causing the inhibition of zinc-induced metallothionein transcription. (A12, L16, A34, A35, A36) WEIGHT OF EVIDENCE CHARACTERIZATION: Under the current guidelines (1986), Cr(VI) is classified as Group A - known human carcinogen by the inhalation route of exposure. Carcinogenicity by the oral route of exposure cannot be determined and is classified as Group D. Under the proposed guidelines (1996), Cr(VI) would be characterized as a known human carcinogen by the inhalation route of exposure on the following basis. Hexavalent chromium is known to be carcinogenic in humans by the inhalation route of exposure. Results of occupational epidemiological studies of chromium-exposed workers are consistent across investigators and study populations. Dose-response relationships have been established for chromium exposure and lung cancer. Chromium-exposed workers are exposed to both Cr(III) and Cr(VI) compounds. Because only Cr(VI) has been found to be carcinogenic in animal studies, however, it was concluded that only Cr(VI) should be classified as a human carcinogen. Animal data are consistent with the human carcinogenicity data on hexavalent chromium. Hexavalent chromium compounds are carcinogenic in animal bioassays, producing the following tumor types: intramuscular injection site tumors in rats and mice, intrapleural implant site tumors for various Cr(VI) compounds in rats, intrabronchial implantation site tumors for various Cr(VI) compounds in rats and subcutaneous injection site sarcomas in rats. In vitro data are suggestive of a potential mode of action for hexavalent chromium carcinogenesis. Hexavalent chromium carcinogenesis may result from the formation of mutagenic oxidatitive DNA lesions following intracellular reduction to the trivalent form. Cr(VI) readily passes through cell membranes and is rapidly reduced intracellularly to generate reactive Cr(V) and Cr(IV) intermediates and reactive oxygen species. A number of potentially mutagenic DNA lesions are formed during the reduction of Cr(VI). Hexavalent chromium is mutagenic in bacterial assays, yeasts and V79 cells, and Cr(VI) compounds decrease the fidelity of DNA synthesis in vitro and produce unscheduled DNA synthesis as a consequence of DNA damage. Chromate has been shown to transform both primary cells and cell lines. HUMAN CARCINOGENICITY DATA: Occupational exposure to chromium compounds has been studied in the chromate production, chromeplating and chrome pigment, ferrochromium production, gold mining, leather tanning and chrome alloy production industries. Workers in the chromate industry are exposed to both trivalent and hexavalent compounds of chromium. Epidemiological studies of chromate production plants in Japan, Great Britain, West Germany, and the United States have revealed a correlation between occupational exposure to chromium and lung cancer, but the specific form of chromium responsible for the induction of cancer was not identified ... Studies of chrome pigment workers have consistently demonstrated an association between occupational chromium exposure (primarily Cr(VI)) and lung cancer. Several studies of the chromeplating industry have demonstrated a positive relationship between cancer and exposure to chromium compounds. ANIMAL CARCINOGENICITY DATA: Animal data are consistent with the findings of human epidemiological studies of hexavalent chromium ... /Chromium (VI)/
- Reproductive toxicity: IDENTIFICATION AND USE: Potassium chromate forms lemon-yellow crystals. It has a limited application in enamels, finishing leather, and rustproofing of metals. Oxidizing agent in analytical chemistry. HUMAN EXPOSURE AND TOXICITY: If ingested, violent gastroenteritis, severe circulatory collapse and toxic nephritis may ensue, or peripheral vascular shock. Eye contact can cause severe damage with possible loss of vision. Evaluation of genotoxic effects of potassium chromate (K2CrO4) and was carried out in human blood lymphocytes in vitro as measured by the electron microscopy in situ end-labeling (EM-ISEL). EM-ISEL was used to

assess DNA single-strand breaks (SSBs) expressed as number of immunogold particles per sq um of chromatin at both chromosomal and nuclear DNA levels. Quantification of SSBs by EM-ISEL showed that potassium chromate is genotoxic agent at non-cytotoxic concentrations. Potassium chromate quadrupled frequency of sister-chromatid exchanges in cultured human fibroblasts. Potassium chromate induced DNA damage and unscheduled DNA synthesis in cultured human fibroblasts. ANIMAL STUDIES: The embryotoxic and teratogenic potential of potassium chromate was evaluated by the teratological analysis of mouse fetuses. The test chemical was administered intraperitoneally to mice of both sexes for 30 days. Teratological scanning of the fetuses born to treated animals revealed a reduction in the number of live implants and litter size. Higher incidence of resorption and dead litter indicated the embryotoxic effect of the test chemical. Malformations, both skeletal and morphological, suggest the possibility of potassium chromate being fetotoxic. Potassium chromate induced significant and dose-related increase in micronucleated polychromatic erythrocytes (micronuclei) in bone marrow of mice following 2 ip injections of doses ranging from 12-48 mg/kg body wt. Potassium chromate was tested for its potential to induce forward mutations at the thymidine kinase locus in L5178Y mouse lymphoma cells. Strong positive responses at survivals greater than 10% were observed. ECOTOXICITY STUDIES: 90 Days after hatching, young carp were reared for 75 wk in test waters of pH 7 & 5 containing 0.1 ppm potassium chromate. This pollutant caused deformation in the bone by chronic leaching of calcium, and the low pH hastened the leaching. Hexavalent chromium is a known carcinogen. Chronic inhalation especially has been linked to lung cancer. Hexavalent chromium has also been know to cause reproductive and developmental defects. (A12)
- STOT-single exposure: No data available.
- STOT-repeated exposure: IDENTIFICATION AND USE: Potassium chromate forms lemon-yellow crystals. It has a limited application in enamels, finishing leather, and rustproofing of metals. Oxidizing agent in analytical chemistry. HUMAN EXPOSURE AND TOXICITY: If ingested, violent gastroenteritis, severe circulatory collapse and toxic nephritis may ensue, or peripheral vascular shock. Eye contact can cause severe damage with possible loss of vision. Evaluation of genotoxic effects of potassium chromate (K2CrO4) and was carried out in human blood lymphocytes in vitro as measured by the electron microscopy in situ end-labeling (EM-ISEL). EM-ISEL was used to assess DNA single-strand breaks (SSBs) expressed as number of immunogold particles per sq um of chromatin at both chromosomal and nuclear DNA levels. Quantification of SSBs by EM-ISEL showed that potassium chromate is genotoxic agent at non-cytotoxic concentrations. Potassium chromate quadrupled frequency of sister-chromatid exchanges in cultured human fibroblasts. Potassium chromate induced DNA damage and unscheduled DNA synthesis in cultured human fibroblasts. ANIMAL STUDIES: The embryotoxic and teratogenic potential of potassium chromate was evaluated by the teratological analysis of mouse fetuses. The test chemical was administered intraperitoneally to mice of both sexes for 30 days. Teratological scanning of the fetuses born to treated animals revealed a reduction in the number of live implants and litter size. Higher incidence of resorption and dead litter indicated the embryotoxic effect of the test chemical. Malformations, both skeletal and morphological, suggest the possibility of potassium chromate being fetotoxic. Potassium chromate induced significant and dose-related increase in micronucleated polychromatic erythrocytes (micronuclei) in bone marrow of mice following 2 ip injections of doses ranging from 12-48 mg/kg body wt. Potassium chromate was tested for its potential to induce forward mutations at the thymidine kinase locus in L5178Y mouse lymphoma cells. Strong positive responses at survivals greater than 10% were observed. ECOTOXICITY STUDIES: 90 Days after hatching, young carp were reared for 75 wk in test waters of pH 7 & 5 containing 0.1 ppm potassium chromate. This pollutant caused deformation in the bone by chronic leaching of calcium, and the low pH hastened the leaching. Hexavalent chromium is a known carcinogen. Chronic inhalation especially has been linked to lung cancer. Hexavalent chromium has also been know to cause reproductive and developmental defects. (A12)
- Aspiration hazard: No data available.

Likely routes of exposure

- Irritation of nose, throat, and bronchial tubes can occur, with cough and/or wheezing. Skin contact can cause severe irritation, deep ulcers, or an allergic skin rash.

Symptoms related to the physical, chemical and toxicological characteristics
- IDENTIFICATION AND USE: Potassium chromate forms lemon-yellow crystals. It has a limited application in enamels, finishing leather, and rustproofing of metals. Oxidizing agent in analytical chemistry. HUMAN EXPOSURE AND TOXICITY: If ingested, violent gastroenteritis, severe circulatory collapse and toxic nephritis may ensue, or peripheral vascular shock. Eye contact can cause severe damage with possible loss of vision. Evaluation of genotoxic effects of potassium chromate (K_2CrO_4) and was carried out in human blood lymphocytes in vitro as measured by the electron microscopy in situ end-labeling (EM-ISEL). EM-ISEL was used to assess DNA single-strand breaks (SSBs) expressed as number of immunogold particles per sq um of chromatin at both chromosomal and nuclear DNA levels. Quantification of SSBs by EM-ISEL showed that potassium chromate is genotoxic agent at non-cytotoxic concentrations. Potassium chromate quadrupled frequency of sister-chromatid exchanges in cultured human fibroblasts. Potassium chromate induced DNA damage and unscheduled DNA synthesis in cultured human fibroblasts. ANIMAL STUDIES: The embryotoxic and teratogenic potential of potassium chromate was evaluated by the teratological analysis of mouse fetuses. The test chemical was administered intraperitoneally to mice of both sexes for 30 days. Teratological scanning of the fetuses born to treated animals revealed a reduction in the number of live implants and litter size. Higher incidence of resorption and dead litter indicated the embryotoxic effect of the test chemical. Malformations, both skeletal and morphological, suggest the possibility of potassium chromate being fetotoxic. Potassium chromate induced significant and dose-related increase in micronucleated polychromatic erythrocytes (micronuclei) in bone marrow of mice following 2 ip injections of doses ranging from 12-48 mg/kg body wt. Potassium chromate was tested for its potential to induce forward mutations at the thymidine kinase locus in L5178Y mouse lymphoma cells. Strong positive responses at survivals greater than 10% were observed. ECOTOXICITY STUDIES: 90 Days after hatching, young carp were reared for 75 wk in test waters of pH 7 & 5 containing 0.1 ppm potassium chromate. This pollutant caused deformation in the bone by chronic leaching of calcium, and the low pH hastened the leaching.

SECTION 12: Ecological information

SECTION 12: Ecological information

12.1 Toxicity
Not available.

12.2 Persistence and degradability
Not available.

12.3 Bioaccumulative potential
Not available.

12.4 Mobility in soil
Not available.

12.5 Results of PBT and vPvB assessment
Not available.

12.6 Endocrine disrupting properties
Not available.

12.7 Other adverse effects

Not available.

SECTION 13: Disposal considerations

SECTION 13: Disposal considerations

13.1 Waste treatment methods
Dispose of contents/container in accordance with local/regional/national/international regulations. Do not discharge to drains or the environment.
Waste classification: Not available.
Recommended disposal: Collect as hazardous waste. Contaminated packaging: Dispose of as unused product unless thoroughly cleaned.
Special precautions: Oxidizing material; keep away from combustibles during waste handling and storage.

SECTION 14: Transport information

SECTION 14: Transport information

14.1 UN number
Not available.

14.2 UN proper shipping name
Not available.

14.3 Transport hazard class(es)
Not available.

14.4 Packing group
Not available.

14.5 Environmental hazards
Not available.

14.6 Special precautions for user
Not available.

14.7 Transport in bulk according to IMO instruments
Not available.

SECTION 15: Regulatory information

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Not available.

15.2 Chemical safety assessment
Not available.

SECTION 16: Other information

SECTION 16: Other information

Product name: Potassium chromate, ACS
Catalog no.: CS-CG-00058
CAS no.: 7789-00-6
Supplier: Clearsynth Labs Ltd., Mumbai, India
Emergency phone: +91-22-245045900

Revision date: Not available
Version: Not available

Disclaimer: The information provided in this SDS is based on data believed to be accurate at the time of preparation. It is intended for guidance in safe handling, use, processing, storage, transportation, disposal, and release and is not considered a warranty or quality specification. Conditions of use are beyond the supplier's control.

DISCLAIMER

This MSDS is system-generated. Please verify and confirm all data, statements, and values with the Support Team before use or distribution.