

**MATERIAL SAFETY DATA SHEET****1- CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

MANUFACTURER	PIGMENT SANAYİ A.Ş.
ADDRESS and PHONE NUMBERS IN CASE OF EMERGENCY	Kemalpaşa Asfaltı No:44 Kemalpaşa İzmir/TURKEY Tel:+902328770400 Fax:+902328770401
PRODUCT NAME	Strontium Chromate Pigment
APPLICATION	Industrial usage
TRADE NAME/SYNONYMS	CHROMIC ACID, STRONTIUM SALT; C.I. PIGMENT YELLOW 32; DEEP LEMON YELLOW; STRONTIUM CHROMATE 12170; STRONTIUM CHROMATE A; STRONTIUM YELLOW; CHROMIC ACID, STRONTIUM SALT(1:1); STRONTIUM CHROMATE(1:1); STRONTIUM CHROMATE(VI); STRONTIUM CHROMATE X-2396; X-2865; STCC 4963377; NA 9149; OHS21990; RTECS GB3240000
PRODUCT CODE	SC-47
CHEMICAL CLASS	Inorganic Strontium compound, inorganic salt.
CHEMICAL FORMULA	SrCrO <sub>4</sub>

**2- COMPOSITION AND INFORMATION ON INGREDIENTS**

Cas Number	EC (EINECS) Number	Chemical Name	Formula	% Strontium Chromate
7789-06-2	232-142-6	Strontium Chromate	SrCrO <sub>4</sub>	100

**3- HAZARDS IDENTIFICATION**

<b>HAZARD DESCRIPTION</b>	T Toxic N Dangerous for the environment
<b>INFORMATION PERTAINING TO PARTICULAR DANGERS FOR MAN AND ENVIRONMENT</b>	R 45 May cause cancer. R 22 Harmful if swallowed. R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

**4- FIRST AID**

<b>LIMITS OF EXPOSURE</b>	
<b>LONG TIME EXPOSURE</b>	<b>ACUTE, CHRONIC</b>
	<b>FIRST AID</b>
EYE CONTACT : Harmful.	In case of contact, immediately flush eyes with water for at least 15 min. Call a physician.
SKIN CONTACT : Harmful.	Flush skin with water and soap, Wash clothes before reuse.
INGESTION : --	Call a physician.
INHALATION : Harmful.	If not breathing perform artificial respiration, if breathing give fresh oxygen. Remove to fresh air and call a physician.
TOXIC TYPE :	-
OTHER ADVISES :	-

**5- FIRE FIGHTING MEASURES**

SUITABLE EXTINGUISHING AGENTS	CO2, extinguishing powder or water spray. Fight larger fires with water spray.
SPECIAL HAZARDS CAUSED BY THE MATERIAL, ITS PRODUCTS OF COMBUSTION OR RESULTING GASES	In case of fire, the following can be released: Toxic metal oxide fume Corrosive gases/vapours.
PROTECTIVE EQUIPMENT	Wear self-contained respirator. Wear fully protective impervious suit.

**6- ACCIDENTAL RELEASE MEASURES**

PERSON RELATED SAFETY PRECAUTIONS	Wear protective equipment. Keep unprotected persons away. Ensure adequate ventilation
MEASURES FOR ENVIRONMENTAL PROTECTION	Do not allow material to be released to the environment without proper governmental permits.
MEASURES FOR CLEANING / COLLECTING	Dispose the material according to item 13.
OTHER PROCEDURES	See Section 7 for information on safe handling See Section 8 for information on personal protection equipment. See Section 13 for disposal information.

**7- HANDLING AND STORAGE**

STORING and LOADING PRECAUTIONS	Keep away from eye and skin contact. Place in closed containers. Keep away from food. If contacted wash thoroughly.
HANDLING	Keep container tightly sealed. Store in cool, dry place in tightly closed containers. Ensure good ventilation at the workplace. Open and handle container with care.
OTHERS	Do not inhale and protect from flammable media.

**8- EXPOSURE CONTROLS AND PERSONAL PROTECTION**

Properly operating chemical fume hood designed for hazardous chemicals and having an average face velocity of at least 0.5 m per second.

LD<sub>50</sub> : > 5,000 mg/kg.

STRONTIUM

0.1

mg(CRO<sub>3</sub>)/m<sup>3</sup>

0.0005

mg(Cr)/m<sup>3</sup>

0.001

mg(Cr(VI))/m<sup>3</sup>

NIOSH

OSHA

ACGIH

recommended

CHROMATE:

ceiling

TWA

TWA

MEASUREMENT METHOD: Particulate filter; Reagent; Visible spectrophotometry; NIOSH III # 7600, Hexavalent Chromium.

**Components with limit values that require monitoring at the workplace:**

Strontium chromate	mg/m <sup>3</sup>
ACGIH TLV	0,0005 A2 (as Cr)
BELGIUM TWA	0,5
DENMARK TWA	0,5
FINLAND TWA	0,5 (Carcinogen)
NETHERLANDS TWA	0,01 (as Cr)
USA PEL	0,1 – Ceiling (as CrO <sub>3</sub> )

**Personal Protection**

EYES	Safety glasses or goggles. Eye-flushing stations.
SKIN	Rubber gloves and protective clothes, apron, impervious gloves.
INHALATION	Vomit and call a physician.
LOCAL VENTILATION EXITS	Mechanical(General) local ventilation is enough.
OTHER PROTECTIVE EQUIPMENTS	The usual precautionary measures for handling chemicals should be followed. Keep away from foodstuffs, beverages and feed. Remove all soiled and contaminated clothing immediately. Wash hands before breaks and at the end of work.

**9- PHYSICAL AND CHEMICAL PROPERTIES**

<b>FORM</b>	Powder, crystals	<b>SOLUBILITY IN WATER</b>	Slightly soluble (0.12 % at 15°C)
<b>MELTING POINT</b>	N/A	<b>COLOUR</b>	Yellow
<b>BOILING POINT</b>	N/A	<b>ODOR</b>	Odorless
<b>FREEZING POINT</b>	N/A	<b>MOLECULAR WEIGHT</b>	203,62
<b>BULK DENSITY</b> ±15 %	250kg/m <sup>3</sup>	<b>EVAPORATION DENSITY</b>	N/A
<b>SPECIFIC GRAVITY</b>	3,7±0,1	<b>EVAPORATION RATE</b>	N/A
<b>OTHER DATA</b>		<b>pH</b>	7,0±0,1

**10- STABILITY AND REACTIVITY**

<b>STABILITY</b>	Stable under normal conditions
<b>UNSTABILITY REASONS</b>	Avoid heat, flames, sparks and other sources of ignition. Avoid contact with incompatible materials.
<b>POLIMERIZATION and ITS DANGERS</b>	None.
<b>UNSTABILITY CONDITIONS and MATERIALS</b>	Decomposition will not occur if used and stored according to specifications.
<b>DANGEROUS PRODUCTS OF DECOMPOSITION</b>	Toxic metal oxide fume oxides of chromium Corrosive gases/vapors.

**11- TOXICOLOGICAL INFORMATION**

Acute toxicity and primary irritant effect.

ON THE SKIN	Irritant to skin and mucous membranes.
ON THE EYE	Powder: irritant effect
SENSITIZATION	No sensitizing effects known.
SUBACUTE TO CHRONIC TOXICITY	Strontium has a low order of toxicity. High doses have caused changes in blood clotting factors, adrenal function and liver function. Chromates may cause ulceration and perforation of the nasal septum, liver and kidney damage, and ulceration of the skin.
ADDITIONAL TOXICOLOGICAL INFORMATION	To the best of our knowledge the acute and chronic toxicity of this substance is not fully known. IARC-1: Carcinogenic to humans: sufficient evidence of carcinogenicity. NTP-1: Known to be carcinogenic: sufficient evidence from human studies. ACGIH A2: Suspected human carcinogen: Agent is carcinogenic in experimental animals at dose levels, by route(s) of administration, at site(s), of histologic type(s), or by mechanism(s) considered relevant to worker exposure. Available epidemiologic studies are conflicting or insufficient to confirm an increased risk of cancer in exposed humans. The Registry of Toxic Effects of Chemical Substances (RTECS) contains tumorigenic and/or carcinogenic and/or neoplastic data for components in this product.

**12- ECOLOGICAL INFORMATION**

Also poisonous for fish and plankton in water bodies.

Do not allow material to be released to the environment without proper governmental permits.

**13- DISPOSAL INFORMATION**

Consult state, local or national regulations for proper disposal. Disposal must be made according to official regulations.

**Recommended cleansing agent:** Water, if necessary with cleansing agents.

**14- TRANSPORT INFORMATION**

**PROPER SHIPPING NAME** : TOXIC SOLID, INORGANIC, n.o.s.  
**HAZARD CLASS** : 6.1  
**U.N. NUMBER** : 3288  
**PACKING GROUP** : III

**Land transport ADR/RID (cross-border)**

**ADR/RID CLASS** : 6.1  
**U.N. NUMBER** : 3288  
**ITEM** : 65C

**Maritime transport IMDG:**

**IMDG CLASS** : 6.1  
**U.N. NUMBER** : 3288  
**PACKING GROUP** : III

**15- REGULATIONS**

T : Toxic

N : Dangerous for the environment.

**EUROPEAN RISK and SAFETY CODES**

- R 45 May cause cancer.
- R 22 Harmful if swallowed.
- R 50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
- S 53 Avoid exposure - obtain special instructions before use.
- S 45 In case of accident or if you feel unwell, seek medical advice immediately.

**16- OTHER INFORMATION**

Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees. This information is furnished without warranty, and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.