Safety Data Sheets

Hrazdan ochre Py43

Product code: PS-MI0203
Department: iron oxides dry pigments
C.A.S. : 14808-60-7

Section: 1 Identification

Product name	Hrazdan ochre
Material use	Pigment, used in different places to give color
Index de couleur :	Py43
Chemical composition	Silicon Dioxide matrix (31.49 %) with mineral components.

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Section: 2 Hazard Identification

NFPA Classification:

Health Hazard:	1, Slight
Fire Hazard:	0, Insignificant
Reactivity Hazard:	0, Insignificant
Special Hazards:	None

HGS Label Elements

Signal Word

Danger

GHS Classification

Eye irritation-Cat.2B
Carcinogenicity-Cat.2
Specific target organ systemic toxicity-repeated exposure, Inhalation, Lungs-Cat.1

Hazard statements

H320 Causes Eye Irritation
H372 Causes damage to lungs through prolonged or repeated exposure if inhaled.

Precautionary Statements

P201: Obtain special instructions before use.
P202: Do not handle until all safety precautions have been read and understood.
P260: Do not breathe dust.
P280: Wear protective eye protection.
P305 + P351 +P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337 + P313: If eye irritation persists: Get medical attention.
P405: Store locked up.
P501: Dispose of contents to an authorized landfill in accordance with all applicable regulations.

Section: 3 Composition / Information on Ingredients

HAZARDOUS INGREDIENTS	CHEMICAL IDENTITY	CAS #	PERCENTAGE BY WEIGHT
Silicon Dioxide	SiO2	14808-60-7	31.49 including quartz
Aluminum Oxide	Al2O3	1344-28-1	10.81
Iron Oxide	Fe2O3	1309-37-1	6.02
Magnesium Oxide	MgO	1309-48-4	0.61
Calcium oxide	CaO	1305-78-8	0.45
Potassium Oxide	K2O	37382-43-7	1.60
Sodium Oxide	NaO	12401-86-4	0.30
Quartz ((rystalline)		14808-60-7	22.0

Note: Detection Limit for Crystalline Quartz is 0.75%

Chemical identity: Silicon Dioxide matrix (31.49%) with mineral components.
Common name Crushed Rock, Hrazdan ochre, Py43
Appearance: yellow powder.
Particle size: 5- 25 mkm
Numbers of identity: CAS 14808-60-7
Impurities: Impurities are reacted into the matrix and do not present themselves as individual chemicals. They are represented as oxides to give them an identity. They contribute to the classification since they are eye irritants and are over 1% of the total weight.

Section: 4 First Aid Measures

Skin contact: Since pigment particles will dry the skin, it is advisable to wash the contaminated area with soap and water. Remove contaminated clothing and wash before reuse. If irritation develops, get medical attention.
Eye contact: Hold eyelids apart and flush eyes with plenty of water for at least 15 minutes, tilting head sideways to allow the water to wash out the dust. If irritation persists, seek medical attention.
Ingestion: If swallowed, do NOT induce vomiting. Other than abdominal discomfort there should be no acute exposure problems from small amounts ingested (less than 5 grams). If massive quantities are ingested, seek medical attention.

Section: 5 Fire Fighting Measures

This product is not flammable, combustible or explosive.
Suitable extinguishing media: Not applicable.
Unsuitable extinguishing media: Not applicable.
Specific hazards in case of fire: Not applicable.
Special protective equipment and precaution for fire fighters: Not applicable.

Section: 6 Accidental Release Measures

Environmental precautions:	This product will not harm the environment but the strong characteristic color may stain surfaces.
Methods and materials for containment and cleaning up:	
For small spills less than 1.0 kilogram (2.2 pounds):	Gently, without creating dust in the air, use a gloved hand or a spatula to push the powder into a plastic bag or closeable container, label and seal immediately. Do not let people or vehicles walk or drive over the spill to prevent dust from being put into the air. Wet mop or wash the area free of the dust using water. Dispose of the rinse water in an approved landfill.
For large spills greater than 1.0 kilogram (2.2 pounds):	Use dustless methods (vacuum with HEPA filter) (High Efficiency Particulate Air) and place into closable container for disposal in an approved landfill. Wet mop or wash the area free of the dust using water. Dispose of the rinse water in an approved landfill.

Section: 7 Handling And Storage

Precautions for safe handling:

As this material is intended to be mixed into liquids or plastic pellets, there is considerable dust put into the air from this operation.Use an air flow over the mixing container away from the operator into a vacuum filter to arrest the dust. Wear protective equipment specified in section 8, such as proper goggles and dust mask. Do not breathe dust. Use adequate ventilation and dust collection. Keep airborne dust concentrations below the permissible exposure limit (“PEL”) of 0.25 mg/M3 (0.25 milligrams per cubic Meter). Do not rely on your sight to determine if dust is in the air. Respirable crystalline silica dust may be in the air without a visible dust cloud.

If crystalline silica dust cannot be kept below permissible limits, wear a respirator approved for silica dust when using,handling,storing or disposing of this product or bag. See section 8 for further information on respirators. Practice good housekeeping. Do not permit dust to collect on walls, floors, sills, ledges, machinery, or equipment. Maintain, clean, and fit test respirators in accordance with OSHA regulations. Maintain and test ventilation and dust collection equipment. Wash or vacuum any clothing that has become dusty.

Beware of tracking pigment into other areas from the pigment on the bottoms of your shoes. Wash hands after use.

The OSHA Hazard Communication Standard, 29 CFR Sections 1910.1200, 1915.1200, 1917.28, 1918.90, 1926.59 and 1928.21, and state and local worker or community “right-to-know” laws and regulations should be strictly followed.

Conditions for safe storage, including incompatibilities:

Keep containers tightly closed in a dry and well-ventilated place. Avoid breakage of bagged material or spills of bulk material. Cleanup: Use dustless methods (vacuum) and place into closable container for disposal, or flush with water. Do not dry sweep. See personal protection measures in section 8. Minimize dust generation and accumulation. Avoid breathing dust. Avoid contact with eyes. Seal broken bags immediately. Continue to follow all SDS/Label warnings when handling empty containers. Do not store next to strong acids such as hydrofluoric acid. Do not store next to chemicals that react with silica such as silanes .

Section: 8 Exposure Control/Personal Protection

Exposure Limits for Crystalline Silica (quartz) CAS: 14808-60-7

USA OSHA PEL TWA	USA ACGIH TLV TWA	USA NIOSH REL TWA	UK 8-hr TWA	Unit
0.25	0.025	0.5	0.1	Mg/M3

Appropriate engineering controls

Ventilation: Use in well-ventilated area with local exhaust. Collect dust right at the source using vacuum filter bag. Keep dust concentration below the PEL (permissible exposure level). See ACGIH “Industrial Ventilation, A Manual of Recommended Practice”) latest edition. If crystalline silica (quartz) is heated to more than 870C, it can change to a form of crystalline silica known as tridymite; if crystalline silica quartz) is heated to more than 1470C it can change to a form of crystalline silica known as cristobalite. The OSHA PEL for crystalline silica as tridymite or cristobalite is one-half of the OSHA PEL for crystalline silica (quartz).

Individual protection measures, such as personal protective equipment (PPE)

Eye protection: Safety glasses with side shields or chemical goggles must be worn. This will prevent airborne crystalline silica dust from entering the eyes and abrading the cornea.

Skin protection: Good personal hygiene practices should always be followed.

Respiratory protection: If it is not possible to reduce airborne exposure levels to below the OSHA PEL with ventilation, use a respiratora that willreduce personal exposures to below the OSHA PEL.

Section: 9 Physical and Chemical Properties

Physical state:	Solid (Powder)
Colour:	Ocre yellow
Odour:	Odorless
Odour threshold:	Odorless pH-value: Not applicable melting point: Not applicable
Freezing Point:	Not applicable
Initial boiling point:	Not applicable
Flash point:	Not flammable
Evaporation rate:	Not applicable
Flammability (solid, gas):	Not flammable
Explosion limits:	Not applicable
Vapour pressure:	Not applicable
Vapour density:	Not applicable
Relative density:	2.65 g/ml for crystalline silica
Solubility:	insoluble in water and organic solvents
Partition coefficient:	Not applicable
Auto-ignition temperature:	Not applicable
Decomposition temperature:	Not applicable
Viscosity:	Not applicable

Section: 10 Stability And Reactivity

Reactivity:	Crystalline silica (quartz) will react with powerful oxidizing agents such as fluorine, chlorine trifluoride and oxygen difluoride. It is not reactive when used in the normal manner intended for its use.
Chemical stability:	No decomposition, if used according to specifications, under normal ambient temperatures and normal storage and handling conditions of temperature and pressure.
Possibility of hazardous reactions:	None known.
Conditions to avoid:	Do not mix with powerful oxidizing agents.
Incompatible materials:	Halogens, strong acids, alkalies and oxidizers.
Hazardous decomposition products:	None are known.

Section: 11 Toxicological Information

The method of exposure to crystalline silica that can lead to the adverse health effects described below is eye penetration.
Eye Hazard:
Acute Toxicity:

Test	Results	Basis
Eye Irritation (Rabbits)	Eye Irritant Category 2B	Based on Testing of Similar Materials

Summary Comments:	May cause slight eye irritation like ocular lesions, which are reversible.
Skin corrosion/irritation:	Has not been found to occur as observed from general practices.
Germ cell mutagenicity:	Data is not available.
Reproductive toxicity:	Data is not available.
STOT-single exposure:	Eyes and lungs specific target organ toxicity have been shown through general observation and IARC studies.
STOT-repeated exposure (Specific Target Organ Toxicity):	Eyes and lungs are at risk for eye irritation and lung silicosis and lung cancer, through general observation and IARC studies.
Aspiration hazard:	Data is not available.

Section: 12 Ecological Information

Crystalline silica (quartz) is not known to be ecotoxic ; i.e., there are no data that suggests that crystalline silica (quartz) is toxic to birds, fish, invertebrates, microorganisms or plants. Therefore, persistence and degradability, bio accumulative potential and mobility in the soil are not factors to be considered.

Section: 13 Disposal Considerations

The packaging and material may be landfilled; however, material should be covered to minimize generation of airborne dust. RCRA: Crystalline silica (quartz) is not classified as a hazardous waste under the Resource Conservation and Recovery Act or its regulations, 40 CFR Sec. 261 et seq. Metal containers are preferred so as to minimize spills due to accidents. Empty the containers downwind wearing appropriate PPE. Sewage disposal is discouraged.
The above applies to materials as sold by KAMA pigments. The material may be contaminated during use, and it is the responsibility of the user to assess the appropriate disposal of the used material.

Section: 14 Transport Information

DOT (United States Department of Transportation)	not regulated under DOT (USA)
IMO/IMDG (International Maritime dangerous Goods)	not regulated under IMO/IMDG
IATA (International Air Transport Association)	not regulated under IATA
ADR (Agreement on Dangerous Goods by Road)	not regulated under ADR (Europe)
RID (Regulations concerning the International Transport of Dangerous Goods (Europe)	not regulated under RID (Europe)
ADN (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)	not regulated under ADN
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code.	Permitted to be carried.

Section: 15 Regulatory Information

UNITED STATES, tasca status	Crystalline silica (quartz) appears on the EPA TSCA inventory under the CAS No. 14808-60-7.
Resource Conservation and Recovery Act (RCRA)	Crystalline silica (quartz) is not classified as a hazardous waste under, or its regulations, 40 CFR Sec 261 et seq.
Comprehensive Environmental Response Compensation and Liability Act (CERCLA)	Crystalline silica (quartz) is not classified as a hazardous substance under regulations of the , 40 CFR Sec 302.
FDA:	Silica is included in the list of substances that may be included in coatings used in food contact surfaces, 21 CFR Sec 175.300(b)(3)(xxvi).

NTP:	Respirable crystalline silica, primarily quartz dusts occurring in industrial and occupational settings, is classified as Known to be a Human Carcinogen.
OSHA Carcinogen:	Crystalline silica (quartz) is not listed.
California Proposition 65:	Crystalline silica (airborne particles of respirable size) is classified as a substance known to the State of California to be a carcinogen. Labels on products sold in California must contain the language: "Warning: This product contains crystalline silica which is known to the state of California to cause cancer in laboratory animals." Also, since this natural product contains trace amounts of heavy metals, such as Arsenic, Cadmium, Mercury, Lead, and Antimony, the following warnings should be on the label: Warning: This natural product contains trace amounts of Arsenic, Cadmium, Lead, and Antimony, which are known to the State of California to cause cancer and to cause developmental defects in laboratory animals.
California, Inhalation Reference Exposure Level (REL):	California established a chronic REL of 3µg (micrograms), for silica (crystalline, respirable). A chronic REL is an airborne level of a substance at or below which no adverse health effects are anticipated in individuals indefinitely exposed to the substance at that level.
Massachusetts Toxic Use Reduction Act:	Silica, crystalline (respirable size, <10microns) is "toxic" for purposes of the Massachusetts Toxic Use Reduction Act.
Pennsylvania Worker and Community Right to Know Act:	Quartz is a hazardous substance under the Act but it is not a special hazardous substance or an environmental hazardous substance.
CANADA	
WHMIS Classification	D2A
OTHER	
EINECS No:	238-878-4
EEC Label:	(Risk/Safety Phrases): R48/20, R40/20, S22, S38

Section: 16 Other Information

abbreviations and accronyms used :

ACGIH	American Conference of Government Industrial Hygienists		
NDSL	Canada, Non-Domestic Substances List		
AICS	Australia, Inventory of Chemical Substances	NFPA	National Fire Protection Agency
CAS	Chemical Abstract Service	NIOSH	National Institute for Occupational Safety and Health
CNS	Central Nervous System	NOEC	No Observed Effect Concentration
DSL	Canada, Domestic Substances List	NTP	National Toxicology Program
EC50	Effective Concentration 50%	NZioC	New Zealand Inventory of Chemicals
EGEST	EOSCA Generic Exposure Scenario Tool	OES	United Kingdom Occupational Exposure Standards
EINECS	European Inventory of Existing Chemical Substances	OSHA	Occupational Safety & Health Administration
ENCS	Japan, Inventory of Existing and New Chemical Substances	PEL	Permissible Exposure Limit
EOSCA	European Oilfield Specialty Chemicals Association	PICCS	Philippines Inventory of Commercial Chemical Substances
GHS	Globally Harmonized System	PRNT	Presumed Not Toxic
IARC	International Agency for Research on Cancer	RCRA	Resource Conservation Recovery Act
IC50	Inhibition Concentration 50%	SARA	Superfund Amendments and Reauthorization Act
IECSC	Inventory of Existing Chemical Substances in China	STEL	Short-term Exposure Limit
KECI	Korea, Existing Chemical Inventory	STOT	Specific Target Organ Toxicity
LC50	Lethal Concentration 50%	TLV	Threshold Limit Value
LD50	Lethal Dose 50%	TSCA	Toxic Substances Control Act
LOAEL	Lowest Observed Adverse Effect Level	TWA	Time Weighted Average
MAK	Germany Maximum concentration Values	UVCB	Unknown or Variable composition, Complex Reaction Products, and Biological Materials
MAK	Germany Maximum Allowable Concentration	WHMIS	Workplace Hazardous Materials Information System

reference manufacturer's material safety data sheet
prepared by Kama pigments

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