



SAFETY DATA SHEET

PC-20 Blue Rutile

According to Appendix D, OSHA Hazard Communication Standard 29 CFR §1910.1200

1. Identification

Product identifier

Product name PC-20 Blue Rutile
Product number 35401D, 35407K

Recommended use of the chemical and restrictions on use

Application Ceramic Glaze
Uses advised against No specific uses advised against are identified.

Details of the supplier of the safety data sheet

Supplier American Art Clay Co Inc
 6060 Guion Road
 Indianapolis,
 IN 46254-1222
 USA
 Toll Free: 1-800-999-5456
 CustomerCare@Amaco.com

Emergency telephone number

Emergency telephone Poison Control 1-800-222-1222

2. Hazard(s) identification

Classification of the substance or mixture

Physical hazards Not Classified
Health hazards Skin Sens. 1 - H317 Carc. 1A - H350 STOT RE 1 - H372
Environmental hazards Not Classified

Label elements

Hazard symbols



Signal word Danger

Hazard statements H317 May cause an allergic skin reaction.
 H350 May cause cancer.
 H372 Causes damage to organs through prolonged or repeated exposure.

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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 vapor/ spray.
- P261 Avoid breathing vapor/ spray.
- P264 Wash contaminated skin thoroughly after handling.
- P270 Do not eat, drink or smoke when using this product.
- P272 Contaminated work clothing must not be allowed out of the workplace.
- P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.
- P302+P352 If on skin: Wash with plenty of water.
- P308+P313 If exposed or concerned: Get medical advice/ attention.
- P314 Get medical advice/ attention if you feel unwell.
- P321 Specific treatment (see medical advice on this label).
- P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.
- P362+P364 Take off contaminated clothing and wash it before reuse.
- P405 Store locked up.
- P501 Dispose of contents/ container in accordance with national regulations.

Contains

Silicon dioxide, 2,2,2 Hexahydro-1,3,5-triazine-1,3,5 triyl triethanol

Other hazards

This product does not contain any substances classified as PBT or vPvB.

3. Composition/information on ingredients

Mixtures

Silicon dioxide	max 15%
CAS number: 14808-60-7	
Classification	
Carc. 1A - H350i STOT RE 1 - H372	
Aluminum Silicate (Kaolin)	max 15%
CAS number: 1332-58-7	
Classification	
Not Classified	
2,2,2 Hexahydro-1,3,5-triazine-1,3,5 triyl triethanol	<1%
CAS number: 4719-04-4	
Classification	
Acute Tox. 4 - H302 Acute Tox. 2 - H330 Eye Irrit. 2A - H319 Skin Sens. 1 - H317 STOT RE 1 - H372	

The full text for all hazard statements is displayed in Section 16.

4. First-aid measures

Description of first aid measures

General information

Get medical attention immediately. Show this Safety Data Sheet to the medical personnel.

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Inhalation	Remove affected person from source of contamination. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Maintain an open airway. Loosen tight clothing such as collar, tie or belt. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Place unconscious person on their side in the recovery position and ensure breathing can take place.
Ingestion	Rinse mouth thoroughly with water. Give a few small glasses of water or milk to drink. Stop if the affected person feels sick as vomiting may be dangerous. Do not induce vomiting unless under the direction of medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Place unconscious person on their side in the recovery position and ensure breathing can take place. Maintain an open airway. Loosen tight clothing such as collar, tie or belt.
Skin Contact	It is important to remove the substance from the skin immediately. In the event of any sensitization symptoms developing, ensure further exposure is avoided. Remove contamination with soap and water or recognized skin cleansing agent. Get medical attention if symptoms are severe or persist after washing.
Eye contact	Rinse immediately with plenty of water. Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 10 minutes.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue. If it is suspected that volatile contaminants are still present around the affected person, first aid personnel should wear an appropriate respirator or self-contained breathing apparatus. Wash contaminated clothing thoroughly with water before removing it from the affected person, or wear gloves. It may be dangerous for first aid personnel to carry out mouth-to-mouth resuscitation.

Most important symptoms and effects, both acute and delayed

General information	See Section 11 for additional information on health hazards. The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Prolonged inhalation of high concentrations may damage respiratory system.
Ingestion	May cause sensitization or allergic reactions in sensitive individuals. Gastrointestinal symptoms, including upset stomach. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.
Skin contact	May cause skin sensitization or allergic reactions in sensitive individuals. Prolonged contact may cause dryness of the skin.
Eye contact	May cause temporary eye irritation.

Indication of immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically. May cause sensitization or allergic reactions in sensitive individuals.
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5. Fire-fighting measures**Extinguishing media**

Suitable extinguishing media	The product is not flammable. Extinguish with alcohol-resistant foam, carbon dioxide, dry powder or water fog. Use fire-extinguishing media suitable for the surrounding fire.
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.

Special hazards arising from the substance or mixture

Specific hazards	Containers can burst violently or explode when heated, due to excessive pressure build-up.
Hazardous combustion products	Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.

Advice for firefighters

Protective actions during firefighting	Avoid breathing fire gases or vapors. Evacuate area. Cool containers exposed to heat with water spray and remove them from the fire area if it can be done without risk. Cool containers exposed to flames with water until well after the fire is out. If a leak or spill has not ignited, use water spray to disperse vapors and protect men stopping the leak. Control run-off water by containing and keeping it out of sewers and watercourses. If risk of water pollution occurs, notify appropriate authorities.
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Special protective equipment for firefighters Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing. Standard Firefighter's clothing including helmets, protective boots and gloves will provide a basic level of protection for chemical incidents.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Wear protective clothing as described in Section 8 of this safety data sheet. Follow precautions for safe handling described in this safety data sheet. Wash thoroughly after dealing with a spillage. Ensure procedures and training for emergency decontamination and disposal are in place. Do not touch or walk into spilled material. Avoid contact with skin and eyes.

Environmental precautions

Environmental precautions Avoid discharge into drains or watercourses or onto the ground.

Methods and material for containment and cleaning up

Methods for cleaning up Wear protective clothing as described in Section 8 of this safety data sheet. Clear up spills immediately and dispose of waste safely. Small Spillages: Collect spillage. Large Spillages: Absorb spillage with non-combustible, absorbent material. The contaminated absorbent may pose the same hazard as the spilled material. Collect and place in suitable waste disposal containers and seal securely. Label the containers containing waste and contaminated materials and remove from the area as soon as possible. Flush contaminated area with plenty of water. Wash thoroughly after dealing with a spillage. For waste disposal, see Section 13.

Reference to other sections For personal protection, see Section 8. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards. For waste disposal, see Section 13.

7. Handling and storage

Precautions for safe handling

Usage precautions Read and follow manufacturer's recommendations. Wear protective clothing as described in Section 8 of this safety data sheet. Keep away from food, drink and animal feeding stuffs. Handle all packages and containers carefully to minimize spills. Keep container tightly sealed when not in use. Avoid the formation of mists. Do not handle until all safety precautions have been read and understood. Do not handle broken packages without protective equipment. Do not reuse empty containers.

Advice on general occupational hygiene Wash promptly if skin becomes contaminated. Take off contaminated clothing and wash before reuse. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product. Wash at the end of each work shift and before eating, smoking and using the toilet. Change work clothing daily before leaving workplace.

Conditions for safe storage, including any incompatibilities

Storage precautions Store away from incompatible materials (see Section 10). Keep only in the original container. Keep container tightly closed, in a cool, well ventilated place. Keep containers upright. Protect containers from damage. Utilize retaining walls to prevent soil and water pollution in the event of spillage. The storage area floor should be leak-tight, jointless and not absorbent.

Storage class Chemical storage.

Specific end uses(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.

8. Exposure controls/Personal protection

Control parameters

Occupational exposure limits

Aluminum Silicate (Kaolin)

Long-term exposure limit (8-hour TWA): ACGIH 2 mg/m³ respirable fraction
A4

Long-term exposure limit (8-hour TWA): OSHA 5 mg/m³ respirable fraction

Long-term exposure limit (8-hour TWA): OSHA 15 mg/m³ total dust

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ACGIH = American Conference of Governmental Industrial Hygienists.
 A4 = Not Classifiable as a Human Carcinogen.
 OSHA = Occupational Safety and Health Administration.

Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate ventilation. Personal, workplace environment or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Use process enclosures, local exhaust ventilation or other engineering controls as the primary means to minimize worker exposure. Personal protective equipment should only be used if worker exposure cannot be controlled adequately by the engineering control measures. Ensure control measures are regularly inspected and maintained. Ensure operatives are trained to minimize exposure.

Eye/face protection

Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Personal protective equipment for eye and face protection should comply with OSHA 1910.133. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses.

Hand protection

Chemical-resistant, impervious gloves complying with an approved standard should be worn if a risk assessment indicates skin contact is possible. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. To protect hands from chemicals, gloves should comply with OSHA 1910.138 and be demonstrated to be impervious to the chemical and resist degradation. Considering the data specified by the glove manufacturer, check during use that the gloves are retaining their protective properties and change them as soon as any deterioration is detected. Frequent changes are recommended.

Other skin and body protection

Appropriate footwear and additional protective clothing complying with an approved standard should be worn if a risk assessment indicates skin contamination is possible.

Hygiene measures

Provide eyewash station and safety shower. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Clean equipment and the work area every day. Good personal hygiene procedures should be implemented. Wash at the end of each work shift and before eating, smoking and using the toilet. When using do not eat, drink or smoke. Preventive industrial medical examinations should be carried out. Warn cleaning personnel of any hazardous properties of the product.

Respiratory protection

Respiratory protection complying with an approved standard should be worn if a risk assessment indicates inhalation of contaminants is possible. Ensure all respiratory protective equipment is suitable for its intended use and is NIOSH approved. Check that the respirator fits tightly and the filter is changed regularly. Gas and combination filter cartridges should comply with OSHA 1910.134. Full face mask respirators with replaceable filter cartridges should comply with OSHA 1910.134. Half mask and quarter mask respirators with replaceable filter cartridges should comply with OSHA 1910.134.

Environmental exposure controls

Keep container tightly sealed when not in use. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

9. Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Colored liquid.
Color	Various colors.
Odor	Slight.
Odor threshold	No information available.
pH	No information available.

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Melting point	No information available.
Initial boiling point and range	No information available.
Flash point	Not applicable.
Evaporation rate	No information available.
Evaporation factor	No information available.
Flammability (solid, gas)	Not applicable.
Upper/lower flammability or explosive limits	Not applicable.
Other flammability	Not applicable.
Vapor pressure	No information available.
Vapor density	No information available.
Relative density	No information available.
Bulk density	No information available.
Solubility(ies)	No information available.
Partition coefficient	No information available.
Auto-ignition temperature	No information available.
Decomposition Temperature	No information available.
Viscosity	No information available.
Explosive properties	No information available.
Explosive under the influence of a flame	No
Oxidizing properties	none

10. Stability and reactivity

Reactivity	See the other subsections of this section for further details.
Stability	Stable at normal ambient temperatures and when used as recommended. Stable under the prescribed storage conditions.
Possibility of hazardous reactions	No potentially hazardous reactions known.
Conditions to avoid	There are no known conditions that are likely to result in a hazardous situation.
Materials to avoid	No specific material or group of materials is likely to react with the product to produce a hazardous situation.
Hazardous decomposition products	Does not decompose when used and stored as recommended. Thermal decomposition or combustion products may include the following substances: Harmful gases or vapors.

11. Toxicological information

Information on toxicological effects

Acute toxicity - oral

Summary Based on available data the classification criteria are not met.

Acute toxicity - dermal

Summary Based on available data the classification criteria are not met.

Acute toxicity - inhalation

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Summary	Based on available data the classification criteria are not met.
ATE inhalation (dusts/mists mg/l)	248.74
<u>Skin corrosion/irritation</u>	
Summary	Based on available data the classification criteria are not met.
<u>Serious eye damage/irritation</u>	
Summary	Based on available data the classification criteria are not met.
<u>Respiratory sensitization</u>	
Summary	Based on available data the classification criteria are not met.
<u>Skin sensitization</u>	
Summary	May cause an allergic skin reaction.
<u>Germ cell mutagenicity</u>	
Summary	Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
Summary	May cause cancer.
IARC carcinogenicity	Contains a substance/a group of substances which may cause cancer. IARC Group 1 Carcinogenic to humans.
<u>Reproductive toxicity</u>	
Summary	Based on available data the classification criteria are not met.
<u>Specific target organ toxicity - single exposure</u>	
Summary	Based on available data the classification criteria are not met.
<u>Specific target organ toxicity - repeated exposure</u>	
Summary	Causes damage to organs through prolonged or repeated exposure.
<u>Aspiration hazard</u>	
Summary	Based on available data the classification criteria are not met.
General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
Inhalation	Prolonged inhalation of high concentrations may damage respiratory system.
Ingestion	May cause sensitization or allergic reactions in sensitive individuals. Gastrointestinal symptoms, including upset stomach. Fumes from the stomach contents may be inhaled, resulting in the same symptoms as inhalation.
Skin Contact	May cause skin sensitization or allergic reactions in sensitive individuals. Prolonged contact may cause dryness of the skin.
Eye contact	May cause temporary eye irritation.
Route of exposure	Ingestion Inhalation Skin and/or eye contact
Target Organs	No specific target organs known.
Medical considerations	Skin disorders and allergies.

12. Ecological information

Ecotoxicity	Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.
<u>Acute aquatic toxicity</u>	
Summary	Based on available data the classification criteria are not met.
<u>Chronic aquatic toxicity</u>	

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Summary Based on available data the classification criteria are not met.

Persistence and degradability

Persistence and degradability The degradability of the product is not known.

Bioaccumulative potential

Bio-Accumulative Potential No data available on bioaccumulation.

Partition coefficient

No information available.

Mobility in soil**Mobility**

No data available.

Other adverse effects

Other adverse effects None known.

13. Disposal considerations**Waste treatment methods****General information**

The generation of waste should be minimized or avoided wherever possible. Reuse or recycle products wherever possible. This material and its container must be disposed of in a safe way. Disposal of this product, process solutions, residues and by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any local authority requirements. When handling waste, the safety precautions applying to handling of the product should be considered. Care should be taken when handling emptied containers that have not been thoroughly cleaned or rinsed out. Empty containers or liners may retain some product residues and hence be potentially hazardous.

Disposal methods

Do not empty into drains. Dispose of surplus products and those that cannot be recycled via a licensed waste disposal contractor. Waste, residues, empty containers, discarded work clothes and contaminated cleaning materials should be collected in designated containers, labeled with their contents. Incineration or landfill should only be considered when recycling is not feasible.

14. Transport information**General**

The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, DOT).

UN Number

UN No. (International) Not applicable.

UN proper shipping name

Proper shipping name (International) Not applicable.

Transport hazard class(es)

Transport Labels (International) No transport warning sign required.

Packing group

Packing group (International) Not applicable.

Environmental hazards**Environmentally Hazardous Substance**

No.

Special precautions for user

Not applicable.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

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15. Regulatory information

Regulatory References OSHA Hazard Communication Standard 29 CFR §1910.1200

US Federal Regulations

SARA Section 302 Extremely Hazardous Substances Tier II Threshold Planning Quantities

None of the ingredients are listed.

CERCLA/Superfund, Hazardous Substances/Reportable Quantities (EPA)

None of the ingredients are listed.

SARA Extremely Hazardous Substances EPCRA Reportable Quantities

None of the ingredients are listed.

SARA 313 Emission Reporting

None of the ingredients are listed.

CAA Accidental Release Prevention

None of the ingredients are listed.

FDA - Essential Chemical

None of the ingredients are listed or exempt.

FDA - Precursor Chemical

None of the ingredients are listed or exempt.

SARA (311/312) Hazard Categories

Carcinogenicity
Respiratory or skin sensitization
Specific target organ toxicity (single or repeated exposure)

OSHA Highly Hazardous Chemicals

None of the ingredients are listed.

US State Regulations

Massachusetts "Right To Know" List

The following ingredients are listed:

Silicon dioxide

max 15%

Rhode Island "Right To Know" List

The following ingredients are listed:

Silicon dioxide

max 15%

Minnesota "Right To Know" List

The following ingredients are listed:

Silicon dioxide

max 15%

New Jersey "Right To Know" List

The following ingredients are listed:

Silicon dioxide

max 15%

Pennsylvania "Right To Know" List

The following ingredients are listed:

Silicon dioxide

max 15%

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Inventories

US - TSCA

The following ingredients are listed or exempt:

Silicon dioxide

US - TSCA 12(b) Export Notification

None of the ingredients are listed or exempt.

16. Other information

Abbreviations and acronyms used in the safety data sheet TDG: The transport of dangerous goods act

- IATA: International air transport association.
- ICAO: Technical instructions for the safe transport of dangerous goods by air.
- IMDG: International maritime dangerous goods.
- CAS: Chemical abstracts service.
- ATE: Acute toxicity estimate.
- LC₅₀: Lethal concentration to 50 % of a test population.
- LD₅₀: Lethal dose to 50% of a test population (median lethal dose).
- EC₅₀: 50% of maximal effective concentration.
- PBT: Persistent, bioaccumulative and toxic substance.
- vPvB: Very persistent and very bioaccumulative.

Classification abbreviations and acronyms

Skin Sens. = Skin sensitisation
 STOT RE = Specific target organ toxicity-repeated exposure

Training advice

Read and follow manufacturer's recommendations. Only trained personnel should use this material.

Revision date

4/25/2021

Revision

43

Supersedes date

11/1/2020

SDS No.

5409

Hazard statements in full

- H302 Harmful if swallowed.
- H317 May cause an allergic skin reaction.
- H319 Causes serious eye irritation.
- H330 Fatal if inhaled.
- H350 May cause cancer.
- H350i May cause cancer by inhalation.
- H372 Causes damage to organs (Respiratory system) through prolonged or repeated exposure.
- H372 Causes damage to organs through prolonged or repeated exposure.
- H372 Causes damage to organs (Lungs) through prolonged or repeated exposure.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.