SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: sand PRODUCT CODES: sand

MANUFACTURER: National Polymers Inc. STREET ADDRESS: 9 Guttman Avenue CITY, STATE, ZIP: Charleroi, Pa. 15022

INFORMATION PHONE: 724-483-9300 EMERGENCY PHONE: Chemtrec 800-424-9300 FAX PHONE: 724-483-9306

PREPARED BY: Harry Jackson

DATE REVISED; 6/16/16

Chemical Name or Class: sand

SECTION 2: HAZARDS IDENTIFICATION

Hazard Overview

GHS Classification: Carcinogenicity category 1, Specific target organ toxicity following repeated exposure category 1, Specific target organ toxicity (single exposure) category 3

GHS Label Elements and Precautionary Statements:

Label Elements: Health hazard, Exclamation Mark



Hazard Statements: DANGER: May cause cancer DANGER: Causes damage to organs through prolonged or repeated exposures (lungs, respiratory system) WARNING: May cause respiratory irritation. Precautionary statements: P102 Keep out of reach of children. P103 Read label before use P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P280 Wear protective gloves/protective clothing/eye protection/face protection P260 Do not breathe dust/fume/gas/mist/vapours/spray. P264 Wash hands thoroughly after handling. P270 Do not eat, drink or smoke when using this product. P261 Avoid breathing dust/fume/gas/mist/vapours/spray P271 Use only outdoors or in a well-ventilated area. Response: P308 + P313 IF exposed or concerned: Get medical advice/attention. P314 Get medical advice/attention if you feel unwell P304 + P340 IF INHALED: Remove victim to fresh air and Keep at rest in a position comfortable for breathing. P312 Call a POISON CENTER or doctor/physician if you feel unwell. Storage: P405 Store locked up P403 + P233 Store in a well-ventilated place. Keep container tightly closed. Disposal: P501 Dispose of contents/container to a waste disposal facility in accordance with local, state, federal or international laws HMIS HAZARD CLASSIFICATION HEALTH: 2 FLAMMABILITY: 0 **REACTIVITY: 0** PERSONAL PROTECTIVE EQUIPMENT: E

POTENTIAL HEALTH EFFECTS

EYES: MAY CAUSE REDDENING OF THE EYES OR EYE IRRITATION FROM AIRBORNE PARTICLES. SKIN: NONE KNOWN INGESTION: NONE KNOWN INHALATION: PROLONGED EXPOSURE TO RESPIRABLE CRYSTALLINE QUARTZ MAY CAUSE DELAYED LUNG INJURY (SILICOSIS). ACUTE OR RAPIDLY DEVELOPING SILICOSIS MAY OCCUR IN A SHORT PERIOD OF TIME IN HEAVY EXPOSURE IN SOME APPLICATIONS SUCH AS SAND BLASTING.

HEALTH HAZARDS (ACUTE AND CHRONIC):

MAY CAUSE DELAYED SILICOSIS OR RAPID SILICOSIS IN SOME OCCUPATIONS SUCH AS SANDBLASTING, SILICOSIS IS A FORM OF A DISABLING PULMONARY FIBROSIS WHICH CAN BE PROGRESSIVE AND COULD LEAD TO DEATH. INHALATION MAY LEAD TO LUNG SCARRING AND MASSIVE FIBROSIS WHICH COULD BE ACCOMPANIED BY RIGHT HEART ENLARGEMENT, HEART FAILURE, OR PULMONARY FAILURE, SMOKING AGGRAVATES THE EFFECTS OF EXPOSURE. MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

RESPIRATORY CONDITIONS OR OTHER ALLERGIC AILMENTS CAN BE AGGRAVATED BY EXPOSURE CARCINOGENICITY

OSHA: NO NTP: YES IARC: YES

ADDITIONAL CARCINOGENICITY INFORMATION:

IARC HAS DETERMINED THAT CRYSTALLINE SILICA INHALED IN THE FORM OF QUARTZ IS CARCINOGENIC TO HUMANS (GROUP 1- CARCINOGENIC TO HUMANS). THE NTP CLASSIFIES RESPIRABLE CRYSTALLINE SILICA AS REASONABLY ANTICIPATED TO BE A CARCINOGEN.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS					
INGREDIENT	<u>CAS NO.</u>	OSHA PEL	<u>ACGIH TLV</u>	OSHA STEL	<u>WEIGHT %</u>
SILICON DIOXIDE	14808-60-7	0.05 mg/m3	0.025 mg/m3	0.05 mg/m3	100

SECTION 2 NOTES:

No toxic chemical(s) subject to the reporting requirements of section 313 of Title III and of 40 CFR 372 are present. FOLLOW OSHA HAZARD COMMUNICATION RULE 29CFR SECTIONS 1910.1200, 1915.99, 1917.28, 1918.9, 1926.59, AND STATE AND LOCAL COMMUNITY RIGHT TO KNOW LAWS. WE RECOMMEND THAT SMOKING BE PROHIBITED IN AREAS WHERE RESPIRATORS MUST BE USED.

SECTION 4: FIRST AID MEASURES

EYES:

FLUSH EYES WITH WATER FOR AT LEAST FIFTEEN MINUTES AND CONSULT A PHYSICIAN IF CONDITIONS WARRANT. SKIN: SKIN CONTACT WILL NORMALLY CAUSE NO HEALTH RISKS INGESTION: IF INGESTED, CONSULT A PHYSICIAN INHALATION: REMOVE VICTIM TO FRESH AIR AND ADMINISTER OXYGEN IF NECESSARY. NOTES TO PHYSICIANS OR FIRST AID PROVIDERS:

SECTION 5: FIRE-FIGHTING MEASURES

 FLAMMABLE LIMITS IN AIR,
 UPPER: not available

 (% by volume)
 LOWER: not available

 FLASH POINT⁰ F: N/A
 LOWER: not available

 FHOD USED:
 N/A

 EXTINGUISHING MEDIA:
 OTHER

 SPECIAL FIRE FIGHTING PROCEDURES:
 CRYSTALLINE SILICA IS NEITHER A FIRE NOR AN EXPLOSION HAZARD

 UNUSUAL FIRE AND EXPLOSION HAZARDS:
 NONE KNOWN.

SECTION 6: RELEASE MEASURES

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED: WEAR RESPIRATOR AND USE DUSTLESS HANDLING EQUIPMENT TO CLEAN UP LARGE SPILLS, PLACE IN SUITABLE CONTAINERS FOR DISPOSAL. FLUSH AREA WITH WATER AFTER PICKUP OF MATERIAL.

SECTION 7: HANDLING AND STORAGE

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORAGE: STORE IN COOL DRY PLACE. PROPERLY LABEL ALL CONTAINERS AND RESEAL ALL PARTIALLY USED CONTAINERS. AVOID CREATING ANY DUST WHEN WORKING WITH THIS MATERIAL. OTHER PRECAUTIONS: AVOID BREATHING DUST GENERATED FROM THE MATERIAL. OBSERVE CONDITIONS OF GOOD GENERAL HYGIENE AND SAFE WORKING PRACTICES. PROVIDE TRAINING FOR YOUR EMPLOYEES RELATING TO OCCUPATIONAL EXPOSURE TO QUARTZ DUST. SEE ASTM STANDARD E1132-86 STANDARD PRACTICE FOR HEALTH REQUIREMENTS RELATING TO EXPOSURE TO

QUARTZ DUST. IF BETTER THAN 500 X PEL USE A SELF CONTAINED BREATHING APPARATUS. IF SANDBLASTING, USE ANY TYPE CE SUPPLIED AIR RESPIRATOR WITH FULL FACE PIECE OR HOOD. Safety phrases

S22 Do not breathe dust S25 Avoid contact with eyes S38 In case of insufficient ventilation wear suitable respiratory equipment S39 Wear eye/face protection

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

RESPIRATORY PROTECTION:

USE A NIOSH APPROVED RESPIRATOR AS REQUIRED TO PREVENT OVER-EXPOSURE TO QUARTZ DUST. PROVIDE SUFFICIENT EXHAUST TO KEEP EXPOSURE LEVELS BELOW THE ACGIH PEL. VENTILATION: USE EXHAUST SUFFICIENT TO MAINTAIN AIRBORNE PARTICULATES BELOW THE ACGIH PEL LIMITS ESTABLISHED. PROTECTIVE GLOVES: N/A EYE PROTECTION: SPLASH GOGGLES OR GLASSES WITH SIDE SHIELDS. OTHER PROTECTIVE CLOTHING OR EQUIPMENT: PROVIDE ANY EQUIPMENT NECESSARY TO PREVENT THE INHALATION OF QUARTZ DUST. WORK HYGIENIC PRACTICES: OBSERVE GOOD GENERAL HYGIENIC PRACTICES.

SEE SECTION THREE FOR OCCPATIONAL EXPOSURE LIMIT VALUES

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: WHITE OF TAN SAND GRANULAR CRUSHED OR GROUND- NO ODOR BOILING POINT OR RANGE ⁰ F: N/A VAPOR DENSITY (AIR = 1): N/A SPECIFIC GRAVITY (H2O = 1): 2.6 EVAPORATION RATE: N/A SOLUBILITY IN WATER: INSOLUBLE IN WATER

Odor Threshhold: N/A pH: N/A Melting point/freezing point: N/A Vapor Pressure: N/A Auto Ignition Temperature: N/A Partition Coefficient: n-octanol/water: N/A Decomposition Temperature: N/A

SECTION 10: STABILITY AND REACTIVITY

STABILITY: STABLE CONDITIONS TO AVOID (STABILITY): CONTACT WITH POWERFUL OXIDIZING AGENTS SUCH AS FLUORINE, CHLORINE, TRIFLUORIDE, MANGANESE TRIOXIDE, OXYGEN TRIFLUORIDE INCOMPATIBILITY (MATERIAL TO AVOID): CAN REACT VIGOROUSLY WITH STRONG OXIDIZING AGENTS- SEE CONDITIONS TO AVOID HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: SILICA WILL DISSOLVE IN HYDROCHLORIC ACID TO FORM A CORROSIVE GAS- SILICON TETRAFLUORIDE HAZARDOUS POLYMERIZATION: WILL NOT OCCUR.

SECTION 11: TOXICOLOGICAL INFORMATION

Silicon dioxide: Inhalation and retention of respirable crystalline silica can cause silicosis in several forms, chronic, accelerated or acute. Acute silicosis can occur with exposures to high concentrations of respirable crystalline silica over a very short time period, the symptoms of acute silicosis include progressive shortness of breath, fever, cough, and weight loss. Acute silicosis can be fatal. IARC concluded that there was sufficient evidence in humans for the carcinogenicity of crystalline silica in the form of quartz (Group 1). Exposure to respirable crystalline silica can also be associated with autoimmune sisease, tuberculosis, kidney damage, non-malignant respiratory disease. For further information, thr NIOSH Hazard Review- Occupational Effects of Occupational Exposure to Respirable Crystaline Silica published in April of 2002 should be reiewed.

SECTION 12: ECOLOGICAL INFORMATION

Silicon Dioxide: There is no data that suggests that crystalline silica is toxic to birds, fish, invertebrates, microorganisms or plants.

SECTION 13: WASTE DISPOSAL

WASTE DISPOSAL METHOD:

DISPOSE OF THE MATERIAL IN A WASTE DISPOSAL SITE IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL LAWS.

SECTION 14: Transport Information

DOT: Not Regulated

IMO/IMDG Not regulated

SECTION 15: REGULATORY INFORMATION

Silicon Dioxide: risk phrases: R 48/20 Harmful – Danger of serious damage to health by prolonged exposure through inhalation. Safety Phrases: S 22 – Do not breathe dust and S 38 – In case of insufficient ventilation, wear suitable respiratory equipment

Crystaline Silica (Silicon Dioxide) is on the TSCA list. NTP list as a known human carcinogen, California proposition 65 list as a known carcinogen, Massachusetts Toxic Use Reduction Act list as toxic, Pennsylvania Worker and community right to know Act list as a hazardous substance.

Crystaline Silica (Silicon Dioxide) is on the Canada DSL – WHMIS Classification D2A Crystaline Silica is on the Australian Inventory of Chemicals Substances list, Japan Ministy of International Trade and Industry list, Korea Existing Chemicals Inventory with registry number 9212-5667 and the Phillipines Inventory of Chemicals and Chemical Substances list.

SECTION 16: OTHER INFORMATION

DISCLAIMER: The information Contained herein is based on the data available and is believed to be accurate, However, the manufacturer makes no warranty expressed or implied regarding the accuracy of this data or the results obtained from the use thereof. Accordingly, we assume no responsibility for injury from the use of this product.

N/A = Not Available See Section 1 for date of preparation