Revision: 01/09/2014



SAFETY DATA SHEET According to 29CFR 1910.1200

Coarse Transfer Powder

1. PRODUCT AND COMPANY IDENTIFICATION

Company name

One Stroke Inks 458 Roberts Ave Louisville, KY 40214 502-366-1070 www.onestrokeinks.com

Product name Cas Number Product description Coarse Transfer Powder Confidential Thermoplastic polyurethane elastomer, polyester aromatic based, see Section 16 for applicable grades. Adhesive component, Coating

Primary product use

2. HAZARD IDENTIFICATION

Appearance Odour Principal Hazards

Naturel powder Faint This material has no known health hazards.

See section 11 for complete hazard information.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Ingredients This material has no known hazards under applicable laws.

4. FIRST AID MEASURES

Eyes Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical attention. If hot melted material should splash into the eyes, flush eyes immediately with water for 15 minutes while holding the eyelids open. See a physician for treatment.

Skin Wash with plenty of soap and water. Get medical attention if irritation develops. Launder contaminated clothing before reuse. For contact with molten product, do not remove contaminated clothing. Flush skin immediately with large amounts of cold water. If possible submerge area in cold water. Pack with ice. DO NOT attempt to peel polymer from skin. Seek medical attention immediately.

Inhalation Remove exposed person to fresh air if adverse effects are observed. **Oral** Treat symptomatically. Get medical attention.

Additional Information If exposed or concerned: Get medical attention.

5. FIRE FIGHTING MEASURES

Flash Point Not applicable.

Extinguishing Media Water spray, dry chemical, foam. CO2 may be ineffective on large fires.

Firefighting Procedures Recommend wearing self-contained breathing apparatus.

Unusual Fire & Explosion Hazards Solid does not readily release flammable vapors.

Thermoplastic polymers can burn. Protect product from flames; maintain

proper clearance when using heat devices, etc. Irritating or toxic substances will be emitted upon burning, combustion or

decomposition. Large masses of molten polymer held at elevated temperatures for extended periods of time may auto-ignite.

6. ACCIDENTAL RELEASE MEASURES

Spill Procedures Take precautions to avoid release to the environment. Prevent entry into sewers and waterways, dispose of in accordance with all federal, state and local environmental regulation. Pick up free solid for recycle and/or disposal.

7. HANDLING AND STORAGE

Pumping Temperature Not applicable.

Maximum Handling Temperature Not determined.

Handling Procedures Loading and unloading operations may cause nuisance dust to form. Do not discharge into drains or the environment, dispose to an authorized waste collection point. Use appropriate containment to avoid environmental contamination. Refer to Processing Guide and/or contact your local Technical Service representative for melt processing temperature range. For most thermoplastic polyurethanes, melt processing is in the range of 177 - 232 deg. C (350 - 450 deg. F), however, some products may process at different temperatures. Heating above 232 deg. C (450 deg. F) can generate hazardous decomposition products (see Section 10). Conduct any operations emitting fumes or vapors (including thermo-forming, heat joining, cutting and or sealing of articles and clean up) under well-ventilated conditions. Avoid breathing process vapors. Do not hold product for extended periods of time at elevated temperatures or allow thick masses of hot polymer to accumulate because they can decompose emitting hazardous gasses. Do not taste, swallow, or chew products. Wash thoroughly after processing. Do not store or consume food in processing areas. Fume condensates may include hazardous contaminants from additives. Condensate may be combustible and should be periodically removed from exhaust hoods, ductwork, and other surfaces. Impervious gloves should be worn during cleanup operations to prevent skin contact. Post thermal processing activities necessary to produce molded articles (such as cutting, sanding, sawing, grinding, drilling, or regrinding) may create dust or "fines." Powders, dust, and/or fines may pose a dust explosion hazard. Do not steam sterilize articles made with Unex resins. Methylene dianinline can be formed under these conditions. Electrostatic buildup may occur when pouring or transferring this product from its container. The spark produced may be sufficient to ignite vapors of flammable liquids. Always transfer product by means which avoid static buildup. Avoid pouring product directly from its container into combustible or flammable solvent. The major off-gasses from normal melt processing are expected to be water vapor and carbon dioxide. Other trace volatile organic components may also be emitted. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Launder contaminated clothing before reuse. Empty container contains product residue which may exhibit hazards of product. Dispose of packaging or containers in accordance with local, regional, national and international regulations. Maximum Storage Temperature Not determined.

Storage Procedures Use good housekeeping measures to prevent dust accumulations. Store in well ventilated place. Take precautions to avoid release to the environment. **Maximum Loading Temperature** Not determined.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Limits None established.

Other Exposure Limits None known.

Engineering Controls Prevent inhalation by providing effective general and, when necessary, local exhaust ventilation to draw spray, aerosol, fume, mist, or vapor away from workers.

Gloves Procedures Use good industrial hygiene practices to avoid skin contact. If contact with the material may occur wear chemically protective gloves.

Eye Protection Safety Glasses.

Respiratory Protection Under normal use conditions, respirator is not usually required. Use appropriate NIOSH/MSHA respiratory protection if the recommended exposure limit is exceeded, or if exposure to vapors is likely. Cutting operations may create small particles from this product. If inhalation of particulates cannot be avoided, wear a dust respirator. Consult with an industrial hygienist to determine the appropriate respiratory protection for your specific use of this material. A respiratory protection program compliant with all applicable regulations must be followed whenever workplace conditions require the use of a respirator.

Clothing Recommendation Long sleeve shirt is recommended.

9. PHYSICAL AND CHEMICAL PROPERTIES

Flash Point Not applicable. Upper Flammable Limit Not determined. Lower Flammable Limit Not determined. Autoignition Point Not determined. Explosion Data Material does not have explosive properties. Vapour Pressure Not determined. pH Not determined. Specific Gravity 1.05 (68 °F) Bulk Density Not determined. Water Solubility Insoluble. Percent Solid Not determined. Percent Volatile Not determined. Volatile Organic Compound Not determined. Vapour Density Not determined. Evaporation Rate Not determined. **Odour** Faint Appearance Natural pellets. Viscosity Not determined. Odour Threshold Not determined. Boiling Point Not determined. Pour Point Temperature Not determined. Melting / Freezing Point Not determined.

The above data are typical values and do not constitute a specification.

10. STABILITY AND REACTIVITY

Stability Material is normally stable at moderately elevated temperatures and pressures. **Decomposition Temperature** Not determined.

Incompatibility None known, avoid contact with reactive chemicals.

Polymerization Will not occur.

Thermal Decomposition Smoke, carbon monoxide, carbon dioxide, aldehydes and other products of incomplete combustion. Under combustion conditions, oxides of the following elements will be formed: nitrogen. May also include isocyanates and small amounts of hydrogen cyanide. **Conditions to Avoid** Not determined.

11. TOXICOLOGICAL INFORMATION

-- ACUTE EXPOSURE --

Eye Irritation May cause eye irritation. Does not meet Canadian D2B or EU R36 criteria. Based on data from components or similar materials. Particulates may cause mechanical irritation. At processing or combustion temperatures this product may emit fumes and vapors that cause irritation, possibly severe, to the eyes.

Skin Irritation Not expected to be a primary skin irritant. Based on data from similar materials. Prolonged or repeated skin contact as from clothing wet with material may cause dermatitis. Symptoms may include redness, edema, drying, and cracking of the skin.

Respiratory Irritation Not expected to cause nose, throat and lung irritation. Based on data from similar materials. At processing or combustion temperatures this product may emit fumes and vapors that cause irritation, possibly severe, to the respiratory tract, eyes, or skin.

Dermal Toxicity The LD50 in rabbits is > 2000 mg/Kg. Based on data from components or similar materials.

Inhalation Toxicity Overexposure to vapors or mist may cause dizziness, headache, nausea, and/or flu-like symptoms. Avoid the inhalation of dust, mists, or vapors.

Oral Toxicity The LD50 in rats is > 10,000 mg/Kg. Based on data from components or similar materials. Ingestion of this material may cause gastrointestinal irritation.

Dermal Sensitization May cause skin sensitzation in sensitive individuals. Based on data from components or similar materials.

Inhalation Sensitization No data available to indicate product or components may be respiratory sensitizers.

-- CHRONIC EXPOSURE --

Chronic Toxicity No data available to indicate product or components present at greater than 1% are chronic health hazards.

Carcinogenicity No data available to indicate any components present at greater than 0.1% may present a carcinogenic hazard.

Mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Reproductive Toxicity No data available to indicate either product or components present at greater than 0.1% that may cause reproductive toxicity.

Teratogenicity No data available to indicate product or any components contained at greater than 0.1% may cause birth defects.

-- ADDITIONAL INFORMATION --

Other Under decomposition conditions, isocyanates may be generated from this product. Isocyanates can cause skin sensitization and/or respiratory sensitization. Pre-existing skin conditions may be aggravated by prolonged or repeated exposure. Persons with sensitive airways (e.g., asthmatics) may react to vapors.

12. ECOLOGICAL INFORMATION

-- ENVIRONMENTAL TOXICITY --

Freshwater Fish Toxicity Not determined. Freshwater Invertebrates Toxicity Not determined. Algae Toxicity Not determined. Saltwater Fish Toxicity Not determined. Saltwater Invertebrates Toxicity Not determined. Bacteria Toxicity Not determined.

-- ENVIRONMENTAL FATE --

Biodegradation Not applicable **Bioaccumulation** Not applicable **Soil Mobility** Not applicable.

13. DISPOSAL CONSIDERATIONS

Waste Disposal This material, if discarded, is not a hazardous waste under RCRA Regulation 40 CFR 261. Treatment, storage, transportation, and disposal must be in accordance with applicable Federal, State/Provincial, and Local regulations.

14. TRANSPORT INFORMATION

ADR/RID Not regulated ICAO/IATA Not regulated IMDG Not regulated

Review classification requirements before shipping materials at elevated temperatures.

15. REGULATORY INFORMATION

-- Global Chemical Inventories --

USA All components of this material are on the US TSCA Inventory or are exempt.

Other TSCA Reg. None known.

EU H phrases: not applicable. P phrases: not applicable. EINECS status: All starting raw materials of this product are listed on EINECS. To obtain information on the REACH compliance status of this product, please visit e-mail us at <u>info@dakotaworldwide.com</u>

16. OTHER INFORMATION

16. OTHER INFORMATION

US NFPA Codes

Health	Fire	Reactivity	Special
1	1	0	N/E

(N/E) - None established

HMIS Codes

Health	Fire	Reactivity
0	0	0

Precautionary Labels

• This material has no known health hazards.

Revision Indicators This MSDS has no revisions since 01 September 2014

THIS SDS COVERS THE FOLLOWING MATERIALS: Coarse Transfer Powder, forwhich the grade name consists of a base polymer that may or may not be followed by asuffix. Applicable designations follow:Base polymers :4073 / 4078 / 14012

Suffixes: MA / 15WHITE / 30WHITE

List of abbreviations and acronyms that could be (but not necessarily are) used in this safety		
data sheet:		
Acronym	Full text	
ADR	European Agreement concerning the international carriage of dangerous goods by road	
ADN	European Agreement concerning the international carriage of dangerous goods by inland	
	waterways	
AICS	Australian Inventory of Chemical Substances	
	American Industrial Hygiene Association Workplace Environmental Exposure Limits	
ASTM	ASTM International, originally known as the American Society for Testing and Materials (ASTM)	
ATP	Adaptation to technical progess	
BCF	Bioconcentration factor	
BetrSichV	German Ordinance on Industrial Safety an Health	
C.C.	Closed cup	
CAS	Chemical Abstract Services	
CESIO	European Committee of Organic Surfactants and their Intermediates	
ChemG	German Chemicals Act	
CLP	Classification, Labelling and Packaging	
CMR	Carcinogenic-mutagenic-toxic for reproduction	
DIN	German Institute of Standardization	
DMEL	Derived minimum effect level	
DNEL	Derived no effect level	
DSL	Domestic Substance List (Canada)	
EC	Effective Concentration	
EC50	Half maximal effective concentration	
EINECS	European Inventory of Existing Commercial Substances	
EL	Effective Loading	
ELINCS	European List of Notified Chemical Substances	
ENCS	Existing and new Chemical Substances (Japanese inventory)	
GefStoffV	German Ordinance on Hazardous Substances	
GGVSEB	German ordinance for road, rail and inland waterway transportation of dangerous goods	
GGVSee	German ordinance for sea transportation of dangerous goods	
GLP	Good Laboratory Practice	
CHS	Globally Harmonised System	
GMO	Genetic Modified Organism	
IATA	International Air Transport Association	
ICAO	International Civil Aviation Organization	
IECSC	Inventory of Existing Chemical Substances in China	
IMDG	International Maritime Dangerous Goods	
ISO	International Organization for Standardization	
KECI	Korean Existing Chemicals Inventory	

LC	Lethal Concentration
LD	Lethal Dose
LL	Lethal Loading
LOAEL	Lowest Observable Adverse Effect Level
LOEL	Lowest Observable Effect Level
N/A	Not applicable
N/D	Not determined
NE	Not established
NDSL	Non-Domestic Substances List (Canada)
NOAEL	No Observable Adverse Effect Level
NOEC	No Observable Effect Concentration
NOEL	No Observable Effect Level
NOELR	No Observable Effect Loading Rate
NZIoC	New Zealand Inventory of Chemicals
0.C.	Open cup
OECD	Organisation for Economic Cooperation and Development
OEL	Occupational Exposure Limit
PBT	Persistent, bioaccumulative, toxic
PEC	Predicted effect concentration
PICCS	Philippine Inventory of Chemicals and Chemical Substances
PNEC	Predicted no effect concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Convention concerning International Carriage by Rail
STOT	Specific Target Organ Toxicity
SVHC	Substances of Very High Concern
TA	Technical Instructions
TLV	Threshold Limit Value (American Conference of Governmental Industrial Hygienists)
TPR	Third Party Representative (Art. 4)
TRGS	Technical Rules for Hazardous Substances
TSCA	Toxic Substances Control Act (U.S. inventory)
UVCB	Substances of Unknown or Variable composition, Complex reaction products or Biological
	materials
VCI	German chemical industry association
vPvB	Very persistent, very bioaccumulative
VOC	Volatile Organic Compound
VwVwS	German Administrative Regulation on the Classification of Substances Hazardous to
	Waters into Water Hazard Classes
WGK	Water Hazard Class
WHO	World Health Organisation

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