



Material Safety Data Sheet

SECTION 1: CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

DATE ISSUED: 18 August 2017

PRODUCTS COVERED BY THIS MSDS:

- StarSource Coal Masterbatch F
- Grade 122F

COMPANY CONTACT INFORMATION:

StarSource, LLC
3757 State Street Suite 2A
Santa Barbara, CA 93105 USA
805-456-7900

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

INGREDIENTS:

Component:	CAS NO.	Weight %
1-Propene	68551-11-1	25-75
Alkenes, C2-3	125997-22-0	25-50
2-Ethylhexan-1-ol	104-76-7	< 10
2-Ethylhexan	123-05-7	< 5
2-Methylhexan-1-ol	624-22-6	< 5
2-Methylpentan-1-ol	105-30-6	< 5
Proprietary nanoparticles	Proprietary	< 2

SECTION 3: HAZARDS IDENTIFICATION

Product liquid and vapor are flammable. Keep away from heat and sources of ignition. Product vapors or mist may be irritating to eyes and respiratory system. Product liquid may cause eye and skin burns. Harmful if swallowed.

ROUTES OF ENTRY & POTENTIAL HEALTH EFFECTS:

EYES: Eye irritant. May cause tearing, blurring of vision and/or corneal injury.

SKIN: May cause skin irritation. Exposed person may experience rash, burns and ulcerations.

INGESTION: May be harmful if swallowed. Side effects may cause irritation or burns of the mouth, throat, esophagus, and stomach with nausea and vomiting. Central nervous system effects may include headaches, weakness, and nausea.

INHALATION: Inhalation of vapors is irritating to the respiratory system, may cause throat pain and cough. Central nervous system effects may include headaches, weakness, and nausea.

CHRONIC HEALTH HAZARDS: NTR

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE: NTR

SECTION 4: FIRST AID MEASURES

EYES: If contact with the eyes, immediately flush eyes with plenty of water for at least 15 minutes. After initial flushing, remove any contact lenses and continue flushing for 15 minutes and consult with a physician. Keep eye wide open while rinsing and lift upper and lower lids to ensure complete removal of chemical.

SKIN: If contact with the skin, immediately remove soaked clothing and wash affected skin with soap and water. Seek medical attention for burns and persistent irritation.

INGESTION: Do not induce vomiting. Seek medical attention immediately.

INHALATION: If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

SECTION 5: FIRE-FIGHTING MEASURES

FLAMMABLE PROPERTIES:

FLASH POINT: > 113 °F (>45°C), TAG CC

AUTOIGNITION TEMPERATURE: Not determined

EXTINGUISHING MEDIA: Water spray, alcohol-resistant foam, carbon dioxide or dry chemical fire extinguishers.

HMIS HAZARD CLASSIFICATION

HEALTH: 3

FLAMMABILITY: 2

REACTIVITY: 0

Hazard Scale: 0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

FIRE FIGHTING PROCEDURES: Fire-fighters should wear full protective clothing for body and eyes and a positive pressure self-contained breathing apparatus. All personnel should avoid contact with liquid or mist. Keep personnel removed or upwind of fire.

HAZARDOUS COMBUSTION PRODUCTS: During a fire, smoke may contain the original material in addition to combustible products of varying composition which may be toxic and/or irritating. Combustion products may include and are not limited to: carbon monoxide, carbon dioxide and hydrocarbons.

SECTION 6: ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED: Dike spill and collect for disposal or reuse. Use absorbents on residual material. Flush spill area with water. Dispose of according to local, state and federal regulations.

PERSONAL PRECAUTIONS: Wear full personal protective equipment for eyes, body and respiratory system. Ventilate spill area. Remove all sources of ignition.

ENVIRONMENTAL PRECAUTIONS: Keep flush material out of waterways. Dispose of cleanup material in an approved manner.

SECTION 7: HANDLING AND STORAGE

HANDLING: Wear protective equipment for eyes, body and respiratory system. Avoid contact with skin, eyes and clothing. Do not breathe vapors or spray mist. Wear necessary protective equipment. Use only with adequate ventilation. Ground and bond all transfer and storage equipment to prevent static sparks and equip with self closing valves, pressure vacuum bungs and flame arrestors.

STORAGE: Store in closed containers in a cool area away from sources of heat or ignition. Precautions should be taken to avoid static electricity discharge. Store in steel, stainless steel, polyethylene, or polypropylene containers. Keep out of reach of children. Maintain containers tightly closed in a well ventilated area.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

VENTILATION: Use local exhaust ventilation, or other engineering controls to maintain levels at below exposure limit requirements.

EYE PROTECTION: Wear chemical splash proof safety goggles or face shield.

SKIN PROTECTION: Wear coveralls and/or chemical apron and rubber footwear where physical contact can occur.

WORK HYGIENIC PRACTICES: Wash hands before breaks and immediately after handling. Do not eat or store food and drinks where this product is used.

RESPIRATORY PROTECTION: Wear a properly fitted NIOSH/MSA approved respirator whenever significant exposure to vapor or mist is likely.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid amber
ODOR: Pungent
MELTING POINT: Not applicable.
BOILING POINT: Not determined.
FREEZING POINT: <32 °F (<0° C).
VAPOR PRESSURE (mmHg): <2.2 mm Hg @ 20 ° C.
VAPOR DENSITY (AIR = 1): Not determined.
SPECIFIC GRAVITY (H2O = 1): 0.85 – 1.00 @ 20 ° C.
FLASH POINT: 60-93° C
SOLUBILITY IN WATER: Slightly soluble.

SECTION 10: STABILITY AND REACTIVITY

STABILITY: Stable under recommended handling and storage conditions.

CONDITIONS TO AVOID (STABILITY): Avoid excess heat and ignition sources. Avoid strong acids, strong bases, and strong oxidizing agents.

INCOMPATIBILITY (MATERIAL TO AVOID): Avoid contact with oxidizing agents.

HAZARDOUS DECOMPOSITION: Products: Carbon monoxide, carbon dioxide, and hydrocarbons may form under fire conditions.

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE TOXICITY (for alcohol component):

- Oral: Acute oral LD50 (rat) = 5000 mg/kg (estimated).
- Dermal: Acute dermal LD50 (rabbit) = 2000 mg/kg.
- Inhalation: The product is not expected to be toxic by inhalation

IRRITATION:

- Skin: Mild skin irritant
- Eyes: Moderate to severe eye irritant

SENSITIZATION: May sensitize some individuals toward asthmatic conditions and allergic skin reactions.

DEVELOPMENTAL TOXICITY: None known.

REPRODUCTIVE TOXICITY: Possible risk of impaired fertility. Suspected of damaging to unborn child.

GENETIC TOXICITY: None known.

SECTION 12: ECOLOGICAL INFORMATION

AQUATIC TOXICITY: LC50 fish (96 hrs, fathead minnows) = 25 - 75 mg/l (estimated).

ACUTE TOXICITY TO INVERTABRATES: EC50 / Daphnia magna/48 hours = 2 - 12 mg/l (estimated).

ACUTE TOXIXITY TO ALGAE: IC50/Algae/72 hours > 45 mg/L (estimated).

PERSISTANCE AND DEGRADABILITY: Product is biodegradable.

SECTION 13: DISPOSAL CONSIDERATIONS

WASTE DISPOSAL METHOD: Do not dump into any sewers, on the ground, or into any body of water. All disposal practices must be in compliance with all local, state and federal laws and regulations.

CONTAINERS: Empty containers retain product liquid and/or vapor residues and can be dangerous. Do not cut or burn or expose empty containers to heat, flame or sources of ignition. Empty containers should be completely drained and disposed in accordance with regulations.

SECTION 14: TRANSPORT INFORMATION

US DOT: UN 1993, combustible and flammable liquid, n.o.s. (contains aldehydes), 3, III, FLAMMABLE. This product is regulated as a hazardous material as defined by the DOT.

TRANSPORT BY SEA IMDG-CODE: UN 1993, combustible and flammable liquid, n.o.s. (contains aldehydes), 3, III, FLAMMABLE. This product is regulated as a dangerous good as defined by the IMDG Code for marine transport.

AIR TRANSPORT ICAO-TI/IATA-DGR: UN 1993, combustible and flammable liquid, n.o.s. (contains aldehydes), 3, III, FLAMMABLE. This product is regulated as a dangerous good as defined by the ICAO/IATA for air transport.

CANADA: UN 1993, combustible and flammable liquid, n.o.s. (contains aldehydes), 3, III, FLAMMABLE. This product is regulated as a dangerous good as defined by the WHIMS classification.

SECTION 15: REGULATORY INFORMATION

Components of this product are listed on the TSCA (US), DSL (Canada), and EINECS (Europe) inventories.

SARA 302: Contains no chemicals subject to 40 CFR 302 reporting.

SARA 311/312: Classified as an immediate (acute) health hazard and a fire hazard.

SARA 313: Contains no chemicals subject to 40 CFR 313 reporting.

SECTION 16: OTHER INFORMATION

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