

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Trade name : TUBALL PLAST_E PP 2 %

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Use of the substance/mixture : The additive for achieving electrical conductivity in thermoplastics.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

OCSiAl LLC
500 S Front St., Suite 860
Columbus, OH 43215, USA
T +1 415 906 5271
usa@ocsial.com

1.4. Emergency telephone number

+1 415 906 5271
09.00-17.00 GMT

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GHS-US classification

Combustible Dust

2.2. Label elements

GHS-US labelling

Signal word (GHS-US) : Warning
Hazard statements (GHS-US) : If small particles are generated during further processing, handling or by other means, may form combustible dust concentrations in air.
Precautionary statements (GHS-US) : P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P243 - Take precautionary measures against static discharge.
P233 - Keep container tightly closed.

2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB).

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification (GHS-US)
Polypropylene	(CAS No) 9003-07-0	98	Combustible Dust
Carbon Nanotube Single-walled below 2 nm (diam.), > 1 micro m (length)	(CAS No) 308068-56-6	2	Eye Irrit. 2A, H319 STOT SE 3, H335

Full text of R- and H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures after inhalation : Move exposed person to fresh air. Keep person warm and at rest. Obtain medical attention if symptoms occur.
First-aid measures after ingestion : Adverse health effects due to ingestion are not anticipated.
First-aid measures after skin contact : If molten material contacts the skin, immediately flush with large amounts of water to cool the affected tissue and polymer. Do not attempt to peel polymer from skin as this will remove the skin. Obtain immediate emergency medical attention if burn is deep or extensive.
First-aid measures after eye contact : Flush eyes thoroughly with water for several minutes and seek medical attention if discomfort persists. In case of eye contact with molten polymer: Continuously flush eye(s) with cool running water for at least 15 minutes. Beyond flushing, DO NOT attempt to remove the material adherent to the eye(s). Immediately seek medical attention.

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4.2. Most important symptoms and effects, both acute and delayed

- Inhalation : Inhalation of process fumes and vapors may cause soreness in the nose and throat and coughing.
- Skin contact : Molten polymer may cause thermal burns.
- Eye contact : Dust contact with the eyes can lead to mechanical irritation.

4.3. Indication of any immediate medical attention and special treatment needed

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : SMALL FIRE: Use dry chemical, CO2, or water spray:
LARGE FIRES: Use water spray hose nozzles from a safe location.
- Unsuitable extinguishing media : Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : May be combustible at high temperature. May form combustible dust concentrations in air. Vapors generated from overheating/melting/decomposition may be flammable and may cause fire/explosion if source of ignition is present.
- Explosion hazard : Potential dust explosion hazard. When dust becomes airborne and is exposed to an ignition source, sufficient combustible/flammable dust may exist to burn in the open or explode if confined.
- Hazardous decomposition products in case of fire : Carbon monoxide, carbon dioxide and unburned hydrocarbons (smoke). The formation of hydrocarbons and aldehydes are possible in the initial stages of a fire (especially in between 400 and 700 C)

5.3. Advice for firefighters

- Firefighting instructions : Fight fire from safe distance and protected location. Avoid raising powdered materials into airborne dust, creating an explosion hazard. Apply aqueous extinguishing media carefully to prevent frothing/steam explosion. Prevent fire-fighting water from entering environment.
- Protection during firefighting : Do not attempt to take action without suitable protective equipment. Wear approved positive pressure self-contained breathing apparatus and firefighter protective clothing.
Combustible particulate solid, will decompose under fire conditions. Calorific Value: 8000 - 11000 kcal/kg Fight fire from safe distance with hose lines or monitor nozzles. Heat from fire may melt, decompose polymer, and generate flammable vapors. Move containers from fire area if it can be done without risk. Evacuate immediately in the event of opening of storage container pressure relief devices or discoloration of container. Always stay away from tanks engulfed in fire. Do not attempt to get on top of storage containers involved in fire. Cool storage containers with large volumes of water even after fire is out.
- Other information : May re-ignite itself after fire is extinguished.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Equip responders with proper protection. Creates dangerous slipping hazard on any hard smooth surface. Equip emergency responders with proper personal protective equipment (PPE) Avoid generating dust. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Potential combustible dust hazard. Polymer particles create slipping hazard on hard smooth surfaces.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

On land, sweep/shovel into suitable disposal containers or vacuum using equipment which avoids ignition risk.

On water, material is insoluble; collect and contain as any solid.

All recovered material should be packaged, labeled, transported and disposed of or reclaimed in conformance with applicable laws and regulations and in conformance with good engineering practices. Reclaim where possible.

6.4. Reference to other sections

No additional information available

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SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed

: None known.

Precautions for safe handling

: Material is in a pellet form. If converted to small particles during further processing, handling, or by other means, may form combustible dust concentrations in air. Avoid dust accumulation in enclosed space. Avoid generating dust; fine dust suspended in air and in the presence of an ignition source is a potential dust explosion hazard. Static discharge (spark), or other ignition sources, in high dust environments may ignite the dust and result in a dust explosion. Electrostatic charge may build during conveying or handling. Equipment handling polymer should be conductive and grounded (earthed) and bonded. Metal containers involved in the transfer of this material should be grounded and bonded. All electrical equipment should conform to applicable electric codes and regulatory requirements for areas handling combustible dusts. After handling, always wash hands thoroughly with soap and water. When bringing the material to processing temperatures vapors may develop may condense in the exhaust ventilation.

Hygiene measures

: Do not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures

: Provide adequate ventilation to minimize dust concentrations.

Storage duration

: 2 years.

Storage conditions

: Keep away from incompatible materials and avoid specific conditions (see section 10). Avoid all possible sources of ignition (spark or flame). Containers should be grounded. Take precautionary measures against electrostatic discharges. Protect from (sun) light.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Polypropylene (CAS No) 9003-07-0	
ACGIH TWA (mg/m ³)	10 mg/m ³ (Inhalable fraction) 3 mg/m ³ (Respirable Particles)
Remark (ACGIH)	Particulates, not otherwise classified
OSHA PEL (TWA) (mg/m ³)	5 mg/m ³ Respirable fraction
Remark (OSHA)	Note: OSHA Total Dust 15 mg/m ³

8.2. Exposure controls

Appropriate engineering controls

: Ensure adequate ventilation. If handling results in dust generation or high temperatures, local exhaust ventilation should be provided to insure that exposure to dust or decomposition products does not exceed the exposure recommended levels.

Personal protective equipment

: Gloves. Protective clothing.



Materials for protective clothing

: Wear suitable protective clothing. Wear chemical resistant protective clothing (EN 14605) and protective shoes (S1P or S3).

Hand protection

: Wear suitable gloves tested to EN 374. When handling hot material, wear heat-resistant protective gloves that are able to withstand the temperature of molten product.

Eye protection

: Safety glasses with side shields.

Respiratory protection

: In case of insufficient ventilation, wear suitable respiratory equipment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state

: Solid

Appearance

: Granular solid

Colour

: Black

Odour

: Odourless

Odour threshold

: No data available

pH

: No data available

Relative evaporation rate (butyl acetate=1)

: No data available

Melting point

: 50 to 170 °C

Freezing point

: No data available

Boiling point

: Decomposes >300 °C

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Flash point	: >345 °C
Auto-ignition temperature	: >300 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Density	: <1 g/cm ³
Solubility	: Insoluble in cold water
Log Pow	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: No data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Avoid contact with strong oxidizers, excessive heat, sparks or open flame.

10.5. Incompatible materials

Oxidizing agents.

10.6. Hazardous decomposition products

Not expected to decompose under normal conditions.

10.7. Other information

At processing temperatures some degree of thermal degradation may occur.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity	: Not classified
Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

No additional information available

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

No additional information available

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

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SECTION 13: Disposal considerations

13.1. Waste treatment methods

- Regional legislation (waste) : Dispose of this material and its container to hazardous or special waste collection point.
Waste treatment methods : Disposal through controlled incineration or authorised waste dump.
Sewage disposal recommendations : Prevent entry to sewers and public waters.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

No dangerous good in sense of transport regulations

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

- Dangerous for the environment : No
Marine pollutant : No
Other information : No supplementary information available

14.6. Special precautions for user

14.6.1. Overland transport

No additional information available

14.6.2. Transport by sea

No additional information available

14.6.3. Air transport

No additional information available

14.6.4. Inland waterway transport

No additional information available

SECTION 15: Regulatory information

US Federal regulations

EPA TSCA Status

All components of this product are listed or excluded from listing on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory.

SARA Section 313 Supplier Notification

This product contains no toxic chemicals in excess of the applicable de minimis concentration that are subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

SARA Section 311/312 Hazard Classes Fire hazard

SECTION 16: Other information

- Other information : This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. It is the user's responsibility to take the mentioned precautionary measures and to ensure that this information is complete and sufficient for the use of this product.

Full text of H-phrases:

Combustible Dust	Combustible Dust
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H319	Causes serious eye irritation
H335	May cause respiratory irritation
R36/37	Irritating to eyes and respiratory system
Xi	Irritant

SDS US (GHS HazCom 2012)

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