



MATERIAL SAFETY DATA SHEET

3DXNano™ ESD ABS

MSDS NO. – 3DXNano™ ESD ABS v1.4

EFFECTIVE DATE: 06/01/14

1 PRODUCT AND SUPPLIER INFORMATION

PRODUCT NAME:

3DXNano™ ESD ABS

CHEMICAL NAME:

Conductive Acrylonitrile Butadiene Styrene (ABS)

COMPANY INFORMATION:

3DXTech

889 76th Street, Unit #1

Byron Center, MI 49315

PHONE: 616-717-3811

EMERGENCY PHONE: 616-717-3811

2 HAZARDS IDENTIFICATION

HAZARD RATINGS: Health: 0 Fire: 1 Reactivity: 0 PPI: A

PERMISSIBLE EXPOSURE LEVEL:

This is a polymeric compound. All ingredients are encapsulated by the polymer and present no likelihood of exposure under normal conditions of processing and handling.

EFFECTS OF OVEREXPOSURE:

ACUTE OR IMMEDIATE EFFECTS:

INGESTION:

Not a probable route of exposure.

SKIN:

Pellets are not likely to cause irritation.

Contact with molten material may cause thermal burns.

Processing fumes may cause irritation.

EYE:

Solid/dust may cause irritation due to mechanical action.

Processing polymeric fumes may cause irritation.

INHALATION:

Processing polymeric fumes may cause irritation to the respiratory tract.

CHRONIC EFFECTS:

None known for this compound.

3 COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS No.	Concentration Range (%)
Acrylonitrile Butadiene Styrene	-	76-94.9
Carbon-based Conductive Additives	-	3-10
Regulated Proprietary Modifiers	Company Secret	0 – 5
Regulated Proprietary Additives	Company Secret	0.1 – 4.0

Note: The composition does not contain any fluorinated or halogenated materials that will create impurities.

4 EMERGENCY FIRST AID

FIRST AID:

EYES:

Flush with water. Consult physician if symptoms persist.

SKIN:

Wash with soap and water. For thermal burns, immediately flush with cold water. Do not attempt to remove polymer from skin. Obtain medical attention.

INHALATION:

Leave exposed area and seek fresh air.

If irritation persists seek medical attention.

5 FIRE AND EXPLOSION HAZARD

FLAMMABILITY CLASS: 1 FLASH POINT: None LEL: None UEL: None

EXTINGUISHING MEDIA:

Water spray and foam. Water spray is preferred.

Dry chemical and CO2 are not generally recommended due to their lack of cooling capacity which may allow re-ignition.

SPECIAL FIREFIGHTING PROCEDURES:

Persons exposed to products of combustion should wear NIOSH approved self contained breathing apparatus and full protective equipment.

UNUSUAL FIRE & EXPLOSION HAZARDS:

This compound has no unusual fire or explosion hazards.

6 ACCIDENTAL RELEASE MEASURES

SPILL OR RELEASE:

Clean up by vacuuming or sweeping to prevent falls. If molten, allow material to cool and place into an appropriate container for disposal.

7 STORAGE CONDITIONS

EPA WASTE NO: N/A

PRECAUTIONS TO BE TAKEN IN HANDLING AND STORING:

Store in a dry, sprinkler equipped warehouse.

Product as shipped is not a combustible dust. Mechanical handling can cause the formation of dusts.

To reduce the risk for dust explosion do not permit dust to accumulate.

OTHER PRECAUTIONS:

Proper purging and shut down procedures should be followed to avoid overheating of this compound.

WASTE DISPOSAL: Dispose in accordance with applicable federal, state and local regulations.

8 PROTECTION INFORMATION

RESPIRATORY PROTECTION: A NIOSH approved respirator is recommended for protection against processing polymeric fumes, or from dust generated from grinding, sanding, or sawing operations.

VENTILATION: Local exhaust is preferred.

PROTECTIVE GLOVES: Canvas or cotton gloves are recommended.

EYE PROTECTION: Safety glasses with side shields are recommended.

OTHER PROTECTIVE EQUIPMENT: None.

9 PHYSICAL/CHEMICAL DATA

FORM: Solid

APPEARANCE: Pellets

COLOR: Black

ODOR: Minimal

FREEZING POINT: N/A

SOLUBILITY/WATER: Insoluble

SPECIFIC GRAVITY: >1

% VOLATILE: N/A

BOILING RANGE: N/A

VAPOR PRES (MM HG): Negligible

MELTING POINT: This product does not possess a specific melting point. It softens gradually over a wide temperature range.

NOTE: Those physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

10 STABILITY AND REACTIVITY

POLYMERIZATION CONDITIONS TO AVOID: None

STABILITY: Stable

INCOMPATIBLE MATERIALS TO AVOID: Strong acids.

HAZARDOUS DECOMPOSITION OR BY-PRODUCTS: Thermal decomposition can yield intense heat, dense smoke, carbon dioxide, and carbon monoxide.

CONDITIONS TO AVOID: Temperatures above 260°C (500°F).

11 TOXICOLOGICAL INFORMATION

No specific toxicological information is available.

12 ECOLOGICAL INFORMATION

No specific ecological information is available.

13 DISPOSAL

WASTE DISPOSAL:

The pellets, regrind, and purge of this material are non-hazardous and may be discarded in accordance with state, federal, and local regulations.

14 TRANSPORT INFORMATION

Land Transport (DOT): Non-Regulated
Sea Transport (IMDG): Non-Regulated
Air Transport (ICAO/IATA): Non-Regulated

15 REGULATORY INFORMATION

SECTION 313 SUPPLIER NOTIFICATION: This product contains no known toxic chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 and 40 CFR372

STATE RIGHT TO KNOW LAWS: No substances on the state hazardous list, for the states indicated below, are used in the manufacture of products on this Material Safety Data Sheet, with the exceptions indicated. While we do not specifically analyze these product, or the raw materials used in their manufacture, for substances on various state hazardous substances lists. To the best of our knowledge the products on this Material Safety Data Sheet contain no such substances except for those specifically listed below:

PENNSYLVANIA:

SUBSTANCES ON THE PENNSYLVANIA HAZARDOUS SUBSTANCES LIST PRESENT AT A CONCENTRATION OF 1% OR MORE: None known.

SUBSTANCES ON THE PENNSYLVANIA SPECIAL HAZARDOUS SUBSTANCES LIST PRESENT AT A CONCENTRATION OF 0.01% OR MORE: None known.

CALIFORNIA PROPOSITION 65:

SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER: None known.

SUBSTANCES KNOWN TO THE STATE OF CALIFORNIA TO CAUSE BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM: None known.

NFPA HAZARD CLASSIFICATION

Health	0
Flammability	1
Reactivity	0

0=Minimal 1=Slight 2=Moderate 3=Serious 4=Severe

*=Chronic Health Hazard

16 MISCELLANEOUS INFORMATION

Prepared by: Business Management

Issued: 05/01/2014

Supersedes: v1.3

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END OF MSDS