

# MATERIAL SAFETY DATA SHEET



## MOLDED FRICTION MATERIAL "33"

### Section 1 NAME AND PRODUCT

TEK-MOTIVE, INC. Date Issued: 01/28/14  
110 Commerce Street  
East Haven, CT 06512  
Contact: Richard Moalli Emergency Tel. No. 203-468-2224  
Material Number: 33 Non-Asbestos Semi-metallic Friction Material

### Section 2 HAZARDOUS INGREDIENTS

Hazardous Component	CAS Number	% Range	OSHA P.E.L.	ACGIH T.L.V.
Barium Sulfate	7727-43-7	2 - 15	15mg/M <sup>3</sup>	10mg/M <sup>3</sup>
Phenolic Resin	9003-35-4	10 - 30	5.0mg/M <sup>3</sup>	5.0mg/M <sup>3</sup>
Carbon	64743-05-1	2 - 15	10mg/M <sup>3</sup>	2.0mg/M <sup>3</sup>
Graphite	7782-42-5	10 - 25	NA	10mg/M <sup>3</sup>
Elastomer Blend	NA	2 - 15	NA	NA
Magnesium Oxide	1309-48-4	2 - 15	15mg/M <sup>3</sup>	5.0mg/M <sup>3</sup>
Iron Powder	7439-89-6	15 - 50	10mg/M <sup>3</sup>	10mg/M <sup>3</sup>
Steel Fiber	NA	10 - 30	NA	NA

### Section 3 PHYSICAL AND CHEMICAL DATA

BOILING POINT (°F) NOT APPLICABLE  
VAPOR PRESSURE (mmHg) NOT APPLICABLE  
VAPOR DENSITY NOT APPLICABLE  
SOLUBILITY IN WATER INSOLUBLE  
SPECIFIC GRAVITY 3.0  
PERCENT VOLATILE (wt/wt) negligible  
EVAPORATION RATE 0  
APPEARANCE & ODOR METALLIC GRAY MATRIX

### Section 4 FIRE AND EXPLOSION HAZARD DATA

FLASH POINT NON-FLAMMABLE  
FLAMMABLE LIMITS LEL NON-FLAMMABLE  
UEL NON-FLAMMABLE  
EXTINGUISHING MEDIA WATER/WATER MIST/FOAM/CO2  
SPECIAL FIRE FIGHTING PROCEDURES NONE  
UNUSUAL FIRE AND EXPLOSION RISKS NONE

**Section 5 HEALTH HAZARD DATA  
FIRST AID AND MEDICAL**

Primary Route(s) of Entry: Inhalation of Dust

Health Hazards (Acute and Chronic): Permissible Exposure Limits (PEL) and Threshold Limit Values (TLV) have not been established for this mixture. Dust created during handling of finished parts should be treated as a hazard. If OSHA nuisance dust allowance is exceeded, appropriate control and protection measures are necessary (see Section 8).

Skin Contact: May cause irritation (see Section 8).

Eye Contact: May cause irritation (see Section 8).

Ingestion: If excessive, seek medical assistance.

Carcinogenicity: See endnotes.

Signs and Symptoms of Overexposure: Watery eyes, skin irritation, heavy breathing or nausea may be symptoms of overexposure.

First Aid: Move victim to fresh air. Flush affected area with clear water.

**Section 6 REACTIVITY DATA**

STABILITY	Stable
POLYMERIZATION	Fully polymerized
INCOMPATIBILITY	None
DECOMPOSITION PRODUCTS	Carbon monoxide and ammonia may be released at high temperatures.
CONDITIONS TO BE AVOIDED	Avoid creation of dust; use fine filter vacuum or dust collector.

**Section 7 STORAGE HANDLING AND USE PROCEDURES**

NORMAL STORAGE AND HANDLING	Avoid creation of dust.
NORMAL USE	Avoid creation of dust without adequate dust collection system.
IN CASE OF SPILLS	Use routine clean up procedures to remove dust.
DISPOSAL	Use normal disposal methods.

**Section 8 PERSONAL PROTECTION INFORMATION**

RESPIRATORY PROTECTION Wear appropriate dust mask (NIOSH approved), especially when nuisance dust levels are exceeded.

VENTILATION Local exhaust or dust collection should be used when handling parts.

HAND PROTECTION Protective gloves and/or barrier creams should be used to minimize possible irritation.

EYE PROTECTION Goggles are recommended.

OTHER EQUIPMENT Normal work clothes and good hygiene.

**Section 9 Section 313 Supplier Notification**

This product contains the following toxic chemicals subject to the reporting requirements of Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986 (40 CFR 372):

NONE

This information should be included in all MSDSs that are copied and distributed for this material.

SPECIAL LABELS: NONE REQUIRED

Part of this information was collected from raw material MSDSs which we believe to be reliable. However, this information is provided without representation or warranty, expressed or implied regarding its accuracy. TEK-MOTIVE, INC. does not assume the responsibility or the liability for loss, damage, or expense arising from the use of this information relative to its handling, storage use or disposal of the product.

Endnotes:

1. Elastomer contains trace amounts of acrylonitrile (CAS# 107-13-1) and butadiene (CAS# 106-99-0). Both are suspected human carcinogens. Normal handling of finished parts will not yield acrylonitrile or butadiene exposure in excess of the OSHA P.E.L or ACGIH T.V.L.