

Material Safety Data Sheet

Carbomix Black Masterbatch

1. GENERAL INFORMATION

Chemical Name:	Styrene-Butadiene Rubber, Carbon Black Masterbatch
CAS Number:	NA/mixture (see Section 1)
CAS Name (Rubber only):	1,3-Butadiene polymer with Ethenylbenzene
Applicable Grades:	1605, 1620, MDS515
Product Use:	Rubber articles and rubber modified articles
Prepared by:	Environmental and Safety Services
Telephone No.:	(504) 355-5655
Manufactured by:	Copolymer Rubber & Chemical Corporation
Street Address:	5955 Scenic Highway, Baton Rouge, LA 70805
Mailing Address:	P. O. Box 2591, Baton Rouge, LA 70821
Date prepared:	June 18, 1993
Supersedes:	CR 2253(R 9/90)

2. CHEMICAL COMPOSITION

Ingredient	CAS #	Wt. % Maximum	Hazard Classification
Styrene-Butadiene Rubber	9003-55-8	67	NH
Disproportionated Tall Oil	61790-12-3/8052-10-6	6	(see Section 3)
Carbon Black	1333-86-4	35	Hazardous by OSHA
Phosphited Polyalkyl Polyphenol	Not assigned	1.7	NH
Aluminum Silicate(a)	22708-90-3	7	Hazardous by OSHA (a)Type MDS515 only

3. FIRE AND EXPLOSION HAZARD DATA

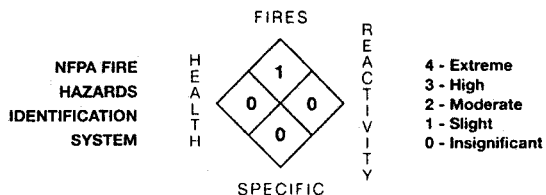
Flash Point Method:	NA
Auto Ignition Temperature:	At temperature above 388 °C (730 °F)
Ignition Temperature:	246 °C (475 °F)
Combustible:	Yes, with the presence of an ignition source.
Upper/Lower Flammable Limits:	NE
Hazardous Combustion Products:	Carbon monoxide, carbon dioxide, products from incomplete combustion, oxides of sulfur and nitrogen, acrid fumes and toxic gases.
Extinguishing Media:	Most fire extinguishing media permitted - water recommended; carbon dioxide not recommended.
Special Fire Fighting Procedure:	During emergency conditions, exposure to thermal decomposition products may cause a health hazard. Use of NIOSH approved self contained breathing apparatus is recommended.
Upper/Lower Explosive Level:	NA
Sensitivity to Impact/Shock:	NA
Sensitivity to Static Discharge:	NA

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(Continued on reverse.)



4. PHYSICAL DATA

Physical State: Solid, bales; MDS515 particulate
 Appearance: Black, with grey bale coating; grey particles MDS515
 Odor: None
 Odor Threshold: NE
 Melting/Freezing Points: NA
 Specific Gravity: 1.0-1.1
 Boiling Point: NA
 Vapor Pressure: NA
 Vapor Density: NA
 Volatiles (% by weight, @ 100 °C): 0.50 max.
 Solubility in Water at 20 °C: Insoluble
 Coefficient of Water/Oil Distribution: NE
 pH: NA
 Evaporation rate: NA

5. SPECIAL REGULATORY HAZARD-HEALTH, SAFETY, AND FOOD

OSHA: Carbon Black and Aluminum Silicate are considered a nuisance dust hazard by 29 CFR 1910.1000 Subpart Z-1 (see Note 1).
 TSCA: Components of this product are listed under TSCA Chemical Substance Inventory.
 FDA: All grades can be used in complying with 21 CFR 177.2600, 'Rubber Articles Intended for Repeated Use'.
 DOT: **United States:** Designation and labeling not applicable as product is not defined or designated as a hazardous material by U.S. Department of Transportation under Title 49 of CFR.
Canada: Not regulated under the Canadian Transportation of Dangerous Goods Regulations.
 SARA Title III: **Section 302/304:** Extremely Hazardous Substances - None.
Section 311: Hazardous Substances - Not Applicable.
Section 313: This product is not subject to reporting requirements (See 40 CFR372).
 WHMIS: This product is considered a Controlled Products under Canada's Workplace Hazardous Material Information System because it contains 1.2-2.0 weight percent Oleic acid, CAS No. 112-80-1 (a component in the Disproportionated Tall Oil), and Carbon Black.

	LD50	LC50	Hazard
Oleic acid	74gm/kg (rat, oral)	Unknown	Skin irritant
Carbon Black	Unknown	Unknown	Nuisance dust

CEPA: Components of this product are included in Canada's DSL.
 EEC: This product is not considered hazardous by the European Economic Community.

6. TOXICOLOGICAL AND HEALTH DATA

Specific Hazard: No acute hazards or effects are known.
 Medical Conditions
 Aggravated by Exposure: Some individuals with specific sensitivities may exhibit eye, nose, throat, or thermal irritation with prolonged exposure to processing fumes or vapors.
 Routes of Exposure: **Eye Contact:** Not a probable source of exposure. Particulates may scratch eye surface or cause irritation.
Skin Contact: A single prolonged exposure is not likely to result in material being absorbed through the skin in a harmful amount. Repeated exposures may cause moderate skin irritation. Exposure to hot material may cause thermal burns.
Ingestion: Not a probable route of exposure.
Inhalation: Not a probable route of exposure under conditions of normal use. Hot fumes or vapors which may form during processing can cause irritation to the respiratory tract.
 Toxicology Information: LD50 = NE; LC50 = NA
Reproductive Effects: None reported
Teratogenicity: None reported
Mutagenicity: None reported
Carcinogenicity: None reported
Others: Skin Irritant: Oleic Acid 15mg/3D-I (Human) Moderate

7. PROTECTIVE AND PREVENTIVE MEASURES

Personal Protective Equipment: **Eye:** Wear safety glasses.
Skin: Wear clothing appropriate to prevent skin contact. Where contact may occur with hot material, wear thermal resistant gloves, arm protection, and a face shield.
Respiratory: Not normally required at ambient temperatures. If processing in area where ventilation is inadequate, wear a NIOSH approved organic vapor respirator with mechanical filtration. If processing conditions generate dust above PEL, wear NIOSH approved respirator for nuisance dust.

Handling Procedures and Equipment:

Avoid skin and eye contact, practice good personal hygiene. Avoid inhalation of fumes or vapors from hot rubbers, compounds, and vulcanizates. Avoid generation of and prolonged breathing of dust.

Engineering Controls:

Local exhaust ventilation is recommended during all hot processing operations.

Exposure Guidelines:

	PEL (OSHA)	TLV (ACGIH)
Carbon Black	3.5 mg/m ³	3.5 mg/m ³
Aluminum Silicate (respirable dust)	5 mg/m ³	5 mg/m ³

8. EMERGENCY AND FIRST AID PROCEDURES

Eye Contact:

Remove as for any foreign object. Flush with clean water for 15 minutes. Obtain medical attention if irritation persists.

Skin Contact:

Wash with soap and water. If thermal irritation, flush affected area with cold water to dissipate heat, then cover with clean cotton sheeting or gauze and get prompt medical attention.

Inhalation:

If dust, fumes or vapors are inhaled, move to fresh air, aid breathing. Obtain medical attention if irritation persists.

Ingestion:

Unlikely to occur.

9. CHEMICAL REACTIVITY

Chemical Stability:

Product is stable at ambient temperature and pressure.

Conditions to Avoid:

Ignition source; product is combustible.

Incompatibility with Other Materials:

None known.

Hazardous Decomposition Products:

Combustion products will be carbon monoxide, carbon dioxide, oxides of sulfur and nitrogen, and products from incomplete combustion.

Hazardous Polymerization:

Will not occur.

10. SPILLS, DISPOSAL, STORAGE GUIDELINES

Spill and Release Information:

Repackage uncontaminated rubbers. Reuse or dispose of as noted below if contaminated.

Disposal Information:

Reuse if possible. Dispose in accordance with local, state and federal regulations and applicable environmental regulations. Material as supplied is not characterized as hazardous under RCRA.

Storage:

Store at ambient temperature, keep away from excessive heat and flame.

11. LABELS

OSHA:

Not Required

WHMIS:

Required

12. ADDITIONAL INFORMATION

Note 1:

Carbon Black, when incorporated into the rubber in the form delivered, is no longer believed to be a nuisance dust hazard by DSM Copolymer. Aluminum silicate may pose a nuisance dust hazard during processing.

Abbreviations:

ACGIH:

American Conference of Governmental Industrial Hygienists

CAS:

Chemical Abstract Service

CEPA:

Canadian Environmental Protection Act

CFR:

Code of Federal Regulations

DOT:

Department of Transportation

DSL:

Domestic Substance List

EEC:

European Economic Community

EPA:

Environmental Protection Agency

FDA:

Food and Drug Administration (U.S.)

IARC:

International Agency for Research on Cancer

LC50:

The concentration in air that causes death in 50% of the animals exposed

LD50:

The dose that causes death in 50% of the animals exposed

mg/m³:

Milligrams (mg) of substance per cubic meter (m³) of air; method of expressing the concentration of a substance in air

NA:

Not applicable

NE:

Not established

NH:

Not hazardous

NFPA:

National Fire Protection Association

NIOSH:

National Institute for Occupational Safety and Health

OSHA:

Occupational Safety and Health Administration

PEL:

Permissible Exposure Limits

RCRA:

Resource and Conservation Recovery Act

SARA:

Superfund Amendments and Reauthorization Act

TLV:

Threshold Limit Value

TSCA:

Toxic Substance Control Act

WHMIS:

Workplace Hazardous Material Information System

DSM Elastomers

North and South America

DSM Copolymer, Inc.
P.O. Box 2591
Baton Rouge, LA, USA 70821-2591

Tel. (504) 355-5655
Toll free: (800) 535-9960
Fax: (504) 267-3631

Customer Applications Development Center
Tech-Line: (800) 824-0357
Fax: (504) 267-3630

Europe

DSM Elastomers Europe B.V.
The Netherlands (Sittard)
Tel. +31 (0) 46 77 36 67

Japan

DSM Idemitsu Co., Ltd.
Japan (Tokyo)
Tel. (81) 3-435-7110

Far East

DSM Elastomers Asia Pacific Pte. Ltd.
Singapore
Tel. (65) 299-6080

Notice: Although the information contained in this MSDS is believed to be correct as of the date hereof, DSM Copolymer makes no representations as to the completeness or accuracy thereof. Those who utilize the product described herein are responsible for determining (a) the suitability of the product for the intended use and (b) the appropriate manner of processing the product to ensure safety and quality. In no event will DSM Copolymer be responsible for damages of any nature resulting from the use of or reliance upon the information contained herein.

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