GHS
SAFETY DATA SHEET

I. PRODUCT IDENTIFICATION

MANUFACTURE/SUPPLIER
Exide Technologies
13000 Deerfield Parkway, Bldg. 200
Milton, GA 30004

FOR FURTHER INFORMATION
Primary Contact:
Exide SDS Support (770) 421-3485
Secondary Contact:
Joe Bolea (423) 989-6377
Fred Ganster (610) 921-4052

CHEMICAL/TRADE NAME (as used on label): Expander (for use in lead acid batteries)

PRODUCT ID: N/A

CHEMICAL FAMILY/ CLASSIFICATION

FOR EMERGENCY
CHEMTREC (800) 424-9300
(703) 527-3887 – Collect
24-hour Emergency Response Contact
Ask for Environmental Coordinator

II. HAZARD IDENTIFICATION

Signal Word: Warning

Category	GHS Codes	Description
Health: **Carc. 2** **STOT SE 3** **STOT RE 1** **Eye Irrit 2** **Aquatic Chronic 4**	H351 H335 H372 H319 P308+P313 P304+340 P305/P351/P338 P337/P313 P312 H413	Suspected of causing cancer through inhalation pathway May cause respiratory irritation Causes damage to respiratory system through prolong or repeated exposure through inhalation Causes serious eye irritation If exposed or concerned: Get medical advice/attention IF INHALED: remove victim to fresh air and keep at rest in a position comfortable for breathing. IF IN EYES: rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing If eye irritation persists: Get medical advice/attention Call a POISON CENTER or physician if you feel unwell May cause long lasting harmful effects to aquatic life
Handling:	 P405 P403/233 P501	Store in locked area Store in a well-ventilated place. Keep container tightly closed Dispose of contents/container in accordance with local/regional/national/international regulation
WARNING: None		
Reactivity: Strong oxidizers such as chlorates, bromates, and nitrates		

III. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	*CAS Number*	*% by Wt.*
Carbon black	1333-86-4	6-21
Nonhazardous ingredients (proprietary)	N/A	79-94

NOTE: N/A = not applicable

IV. FIRST AID MEASURES

Take proper precautions to ensure you own health and safety before attempting to rescue a victim and provide first aid.

Inhalation: Remove from exposure. Rinse nose and mouth with water. Get medical attention if discomfort continues

Skin Contact: Wash thoroughly with soap and water

Eye Contact: Remove from contamination source and remove contaminated clothing. Remove contact lenses before rinsing eyes, if possible. Flush with copious quantities of water for at least 15 minutes. Get medical attention.

Ingestion: Immediately rinse mouth. Drink plenty of water. Do not induce vomiting. Get medical attention.

V. FIRE FIGHTING MEASURES

Flash Point: Not applicable

Flammable Limits: Not applicable

Extinguishing media: CO_2; foam; dry chemical or water fog. Do not use water jet as an extinguisher as this will spread the fire.

Fire Fighting Procedures:

Use full body fire fighting clothing and full face piece positive pressure, self-contained breathing apparatus.
Use water spray to cool containers

Hazardous Combustion Products:

These products may contain residual oxygenated volatiles that can further react and generate heat. In the even the product reaches 230°F, bags should be separated by an air space and allowed to cool and should be removed from the vicinity of other combustibles. Carbon monoxide and carbon dioxide are emitted. It may not be obvious that carbon black is burning unless it is stirred and sparks are apparent.

VI. ACCIDENTAL RELEASE MEASURES

Wear protective clothing as described in this document. Spilled material should be vacuumed, or wet swept where vacuuming is not feasible, and placed into suitable containers for later disposal. Avoid generating dusty conditions. Never use compressed air as a means of cleaning. Do not discharge onto ground or into water courses.

VII. HANDLING AND STORAGE

Handling:

Use with adequate ventilation. Minimize dust generation and accumulation. Avoid breathing airborne dust. Avoid contact with the eyes, skin, and clothing. Avoid ingestion and inhalation. Keep in closed containers.

Storage:

Store in a cool, dry, well-ventilated area away from incompatible materials. Keep away from heat, sparks, and open flame.

VIII. EXPOSURE CONTROLS AND PERSONAL PROTECTION

	Occupational Exposure Limits (mg/m^3)					
Ingredient	US OSHA	US ACGIH	US NIOSH	Quebec PEV	Ontario OEL	EU OEL
Carbon black	3.5	3	3.5	3.5	3.5	3.5(a)
Nonhazardous ingredients (proprietary)	N/A	N/A	N/A	N/A	N/A	N/A

NOTES:

(a) Based on OELs of Belgium, Denmark, France, & UK

N/A – not applicable

Engineering Controls (Ventilation):

Ventilation, as described in the Industrial Ventilation Manual produced by the American Conference of Governmental Industrial Hygienists, should be provided in areas where exposures are above the permissible exposure limits or threshold limit values specified by OSHA or other federal, state, or local regulations.

Hygiene Practices:

Wash hands thoroughly before eating, drinking or smoking after handling.

Respiratory Protection (NIOSH/MSHA approved):

Wear NIOSH/MSHA approved respirator following manufacturers' recommendations where the PEL of 3.5 mg/m^3 is exceeded.

Skin Protection:

Gloves should be worn when handling the product. Nitrile or PVC gloves are recommended.

Eye Protection:

Safety goggles should be worn when using this product to prevent particles of dust from getting into the eyes

Other Protection:

Coveralls or other full body clothing shall be worn during product use and properly laundered after use. Other safety equipment should be worn as appropriate for the industrial environment. Personal clothing and shoes should be protected from contamination with this product.

IX. PHYSICAL DATA - ELECTROLYTE

Boiling Point@760 mm Hg	226 to 237°F	Specific Gravity @ 77°F (H_2O=1)	1.2185 to 1.3028
Melting Point	>3000°C	Vapor Pressure (mm Hg)	13.5 to 17.8
% Solubility in Water	100	pH	Not applicable
Evaporation Rate (Butyl acetate=1)	Less than 1	Vapor Density (AIR=1)	Not Applicable
		Viscosity	Not applicable
Appearance and Odor Theshold	Amorphous, black solid, odorless.	% Volatiles by Volume @70°F	Not Applicable
Octanol Water Partition Coefficient (K_{ow})	Not Applicable		

Note: The properties above reflect 30-40% Sulfuric acid

X. STABILITY & REACTIVITY DATA

Stability: Stable X
Unstable ___

Conditions to Avoid:

Excessive heat or open flame for prolonged periods of time

Incompatibilities: (materials to avoid)

Avoid contact with strong oxidizers, such as chlorates, bromates, and nitrates, inorganic nitrates, and strong acids

Hazardous Decomposition Products:

Combustion will produce carbon monoxide (CO), carbon dioxide (CO2), and sulfurous gases (SO_x).

Hazardous Polymerization:

Will not occur

XI. TOXICOLOGICAL DATA

Routes of Entry:

Carbon black is harmful by inhalation, skin contact, and eye contact.

Acute Toxicity:

Inhalation LD_{50}: No data
Oral LD_{50}: rat: >8000 mg/kg

Inhalation:

Dust may cause upper respiratory tract irritation

Ingestion:

Dust is not likely to produce an adverse effect through ingestion.

Skin Contact:

Dust may cause irritation after prolonged and repeated contact.

Eye Contact:

Dust may cause irritation and conjunctivitis

Synergistic Products:

None known

Additional Information:

Effects of Overexposure - Acute: Carbon black may cause respiratory, skin, and eye irritation.
Effects of Overexposure - Chronic: Carbon black is listed by the IARC as a Group 2B substance (possibly carcinogenic to humans).

Carcinogenicity:

The International Agency for Research on Cancer (IARC) has categorized carbon black as a 2B classification (possible human carcinogen) based upon sufficient animal evidence and inadequate human evidence. Carbon black has not been listed as a

carcinogen by the National Toxicology Program (NTP) or the Occupational Safety and Health Administration (OSHA). The National Institute of Occupational Safety & Health Administration (NIOSH) criteria document on carbon black recommends that only carbon blacks with PAH levels greater than 0.1% be considered suspect carcinogens.

XII. ECOLOGICAL INFORMATION

Environmental Fate: The product is insoluble in water.

Environmental Toxicity:

Aquatic Toxicity: 96-hr LC_{50}, fish (unspecified): >1000 mg/L

XIII. DISPOSAL INFORMATION

US

Treat as a controlled waste. Dispose of industrial wastes in accordance with local, state, and federal regulations.

XIV. TRANSPORT INFORMATION

GROUND – US-DOT/CAN-TDG/EU-ADR/APEC-ADR:
Not regulated as a hazardous material

AIRCRAFT – ICAO- IATA:
Not regulated as a hazardous material

VESSEL – IMO-IMDG:
Not regulated as a hazardous material

ADDITIONAL INFORMATION:
- Transport may require packaging and paperwork, including the Nature and Quantity of goods, per applicable origin/destination/customs points as-shipped.

XV. REGULATORY INFORMATION

United States:

CERCLA (Superfund) and EPCRA: Carbon black is not a CERCLA hazardous substance. Spills of carbon black are not reportable under CERCLA.

TSCA: Carbon black is listed in the TSCA Inventory as a Chemical in Commerce, however, it is exempt from reporting under the Inventory Update Rule (40 CFR 710(b)). Each ingredient chemical listed in Section III of this SDS is also listed on the TSCA Registry.

RCRA: Unused carbon black is not a hazardous waste if disposal is required.

SARA Title III: Carbon black is not a listed "extremely hazardous substance" (Section 304) or a listed "toxic chemical" (Section 313).

NFPA:

Flammability:	=	1
Health:	=	0
Reactivity:	=	0

State/ Country/Organization	Identification	Notifications/Warning
California	California Proposition 65	"Warning" This product contains chemicals known to the State of California to cause cancer."
Canada	All chemical substances in this product are listed on the CEPA DSL/NDSL or are exempt from list requirements.	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations. Refer to the Controlled Products Regulation for product labeling requirements.
EU	European Inventory of Existing Commercial Chemical Substances (EINECS):	All ingredients remaining in the finished product as distributed into commerce are exempt from, or included on, the European Inventory of Existing Commercial Chemical Substances.

XVI. OTHER INFORMATION

DATE ISSUED: September 11, 2013

OTHER INFORMATION:	Distribution into Quebec to follow Canadian Controlled Product Regulations (CPR) 24(1) and 24(2).

SOURCES OF INFORMATION:	Distribution into the EU to follow applicable Directives to the Use, Import/Export of the product as-sold. International Agency for Research on Cancer (1987), IARC Monographs on the Evaluation of Carcinogenic Risks to Humans: Overall Evaluations of Carcinogenicity: An updating of IARC Monographs Volumes 1-42, Supplement 7, Lyon, France. Ontario Ministry of Labor Regulation 654/86. Regulations Respecting Exposure to Chemical or Biological Agents.
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