Negative Expander All Series

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision Date: 09/10/2013 Version: 1.0

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY

Product Identifier

Product Form: Mixtures

Product Name: Negative Expander All Series

Intended Use of the Product

Use of the Substance/Mixture: Lead/acid battery negative plates. For professional use only

Name, Address, and Telephone of the Responsible Party

Company

Atomized Products Group, Inc
3838 Miller Park Dr
Garland, TX 75042
T 972-272-9596
atomizedproductsgroup.com

Emergency Telephone Number

Emergency number : 800-255-3924 (CHEMTEL)
813-248-0585 (CHEMTEL)

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US)

Comb. Dust
Carc. 2 H351

Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US) :

GHS08

Signal Word (GHS-US) : Warning

Hazard Statements (GHS-US) : May form combustible dust concentrations in air
H351 - Suspected of causing cancer

Precautionary Statements (GHS-US) : P201 - Obtain special instructions before use
P202 - Do not handle until all safety precautions have been read and understood
P280 - Wear protective gloves, protective clothing, eye protection, face protection, respiratory protection
P308+P313 - If exposed or concerned: Get medical advice/attention
P405 - Store locked up
P501 - Dispose of contents/container to local, regional, national, territorial, provincial, and international regulations

Other Hazards

Other Hazards Not Contributing to the Classification: Exposure may aggravate those with pre existing eye, skin, or respiratory conditions. Prolonged inhalation of this material may cause benign pneumoniosis called baritosis from barium sulfate contained in this product.

Unknown Acute Toxicity (GHS-US) Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Substances

Mixture

Name	Product identifier	% (w/w)	Classification (GHS-US)
Barium sulfate	(CAS No) 7727-43-7	15 – 40, or 30 – 60, or 60 - 100	Not classified as a hazard
Carbon black	(CAS No) 1333-86-4	3 – 7, or 7 -13, or 10 -30	Carc. 2, H351. Combustible Dust
Sodium ligno sulfonate	(CAS No) 8061-51-6	3 – 7, or 7- 13, or 10 -30, or 30 -60, or 60 - 100	Combustible Dust

Reason for multiple WHMIS ranges: Fluctuating concentration on customer specification.

Full text of H-phrases: see section 16

SECTION 4: FIRST AID MEASURES

Description of First Aid Measures

General: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Obtain medical attention if breathing difficulty persists

Skin Contact: Remove contaminated clothing. Drench affected area with water for at least 15 minutes.Obtain medical attention if irritation persists

Eye Contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if irritation persists

Ingestion: Rinse mouth.Do not induce vomiting. Seek medical attention if a large amount is swallowed.

Most Important Symptoms and Effects Both Acute and Delayed

General: Suspected of causing cancer

Inhalation: Prolonged contact with large amounts of dust may cause mechanical irritation.

Skin Contact: Prolonged contact with large amounts of dust may cause mechanical irritation.

Eye Contact: Repeated or prolonged contact will cause mechanical irritation.

Ingestion: If a large quantity has been ingested : gastrointestinal irritation. May cause nausea, vomiting, and diarrhea.

Chronic Symptoms: Not available

Indication of Any Immediate Medical Attention and Special Treatment Needed

If you feel unwell, seek medical advice (show the label where possible).

SECTION 5: FIREFIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Use extinguishing media appropriate for surrounding fire.

Unsuitable Extinguishing Media: Do not use a heavy water stream. Use of heavy stream of water may spread fire

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not considered flammable but may burn at high temperatures.

Explosion Hazard: Avoid dust clouds in combination with static electricity.Dust explosion hazard in air

Reactivity: Hazardous reactions will not occur under normal conditions. Dust clouds can be explosive

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire

Firefighting Instructions: Use water spray or fog for cooling exposed containers.In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

Protection During Firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

Hazardous Combustion Products: Carbon oxides (CO, CO_2). Barium oxides. Sodium oxides. Sulfur oxides

Other information: Risk of dust explosion

Reference to Other Sections

Refer to section 9 for flammability properties.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

General Measures: Use special care to avoid static electric charges.Keep away from heat/sparks/open flames/hot surfaces. – No smoking.Handle in accordance with good industrial hygiene and safety practice. Avoid prolonged contact with eyes, skin and clothing. Do not breathe dust.

For Non-Emergency Personnel

Protective Equipment: Use appropriate personal protection equipment (PPE).

Emergency Procedures: Evacuate unnecessary personnel.

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.Use appropriate personal protection equipment (PPE).

Emergency Procedures: Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters.

Methods and Material for Containment and Cleaning Up

For Containment: Avoid generation of dust during clean-up of spills.Use only non-sparking tools

Methods for Cleaning Up: Clear up spills immediately and dispose of waste safely.Avoid generation of dust during clean-up of spills.Use only non-sparking tools.Use explosion proof vacuum during cleanup, with appropriate filter, do not mix with other materials. Contact competent authorities after a spill

Reference to Other Sections

See section 8, Exposure Controls/Personal Protection

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Additional Hazards When Processed: Avoid dust production. Accumulation and dispersion of dust with an ignition source can cause a combustible dust explosion, keep dust levels to a minimum and follow applicable regulations. Do not pressurize, cut, or weld containers.

Hygiene Measures: Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Do no eat, drink or smoke when using this product

Conditions for Safe Storage, Including Any Incompatibilities Not available

Technical Measures: Proper grounding procedures to avoid static electricity should be followed. Ground/bond container and receiving equipment.Use explosion-proof electrical, ventilating, and lighting equipment.Comply with applicable regulations.

Storage Conditions: Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from extremely high or low temperatures, ignition sources, incompatible materials

Incompatible Materials: Strong acids, strong bases, strong oxidizers.

Specific End Use(s)

Lead/acid battery negative plates.For professional use only

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Carbon black (1333-86-4)		
Mexico	OEL TWA (mg/m³)	3.5 mg/m³
Mexico	OEL STEL (mg/m³)	7 mg/m³
USA ACGIH	ACGIH TWA (mg/m³)	3 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m3)	3.5 mg/m³
USA NIOSH	NIOSH REL (TWA) (mg/m3)	0.1 mg/m³ (Carbon black in presence of Polycyclic aromatic hydrocarbons)
USA IDLH	US IDLH (mg/m3)	1750 mg/m³
Alberta	OEL TWA (mg/m³)	3.5 mg/m³

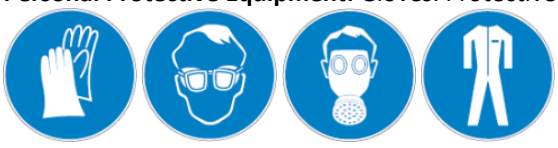
British Columbia	OEL TWA (mg/m³)	3 mg/m³
Manitoba	OEL TWA (mg/m³)	3 mg/m³
New Brunswick	OEL TWA (mg/m³)	3.5 mg/m³
Newfoundland & Labrador	OEL TWA (mg/m³)	3 mg/m³
Nova Scotia	OEL TWA (mg/m³)	3 mg/m³
Nunavut	OEL STEL (mg/m³)	7 mg/m³
Nunavut	OEL TWA (mg/m³)	3.5 mg/m³
Northwest Territories	OEL STEL (mg/m³)	7 mg/m³
Northwest Territories	OEL TWA (mg/m³)	3.5 mg/m³
Ontario	OEL TWA (mg/m³)	3.5 mg/m³
Prince Edward Island	OEL TWA (mg/m³)	3 mg/m³
Québec	VEMP (mg/m³)	3.5 mg/m³
Saskatchewan	OEL STEL (mg/m³)	7 mg/m³
Saskatchewan	OEL TWA (mg/m³)	3.5 mg/m³
Yukon	OEL STEL (mg/m³)	7 mg/m³
Yukon	OEL TWA (mg/m³)	3.5 mg/m³

Barium sulfate (7727-43-7)		
USA ACGIH	ACGIH TWA (mg/m³)	10 mg/m³
USA OSHA	OSHA PEL (TWA) (mg/m3)	5 mg/m³
USA NIOSH	NIOSH REL (TWA) (mg/m3)	5 mg/m³
Alberta	OEL TWA (mg/m³)	10 mg/m³
British Columbia	OEL TWA (mg/m³)	3 mg/m³
Manitoba	OEL TWA (mg/m³)	10 mg/m³
New Brunswick	OEL TWA (mg/m³)	10 mg/m³
Newfoundland & Labrador	OEL TWA (mg/m³)	10 mg/m³
Nova Scotia	OEL TWA (mg/m³)	10 mg/m³
Ontario	OEL TWA (mg/m³)	10 mg/m³
Prince Edward Island	OEL TWA (mg/m³)	10 mg/m³
Québec	VEMP (ppm)	5 ppm (containing no Asbestos and <1% Crystalline silica)
Saskatchewan	OEL STEL (mg/m³)	20 mg/m³
Saskatchewan	OEL TWA (mg/m³)	10 mg/m³

Exposure Controls

Appropriate Engineering Controls: Ensure all national/local regulations are observed. Proper grounding procedures to avoid static electricity should be followed. Use explosion-proof equipment. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure adequate ventilation, especially in confined areas

Personal Protective Equipment: Gloves. Protective goggles.Insufficient ventilation: wear respiratory protection. Protective clothing



Materials for Protective Clothing: Chemically resistant materials and fabrics

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles or safety glasses.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: Use NIOSH-approved air-purifying or supplied-air respirator where airborne concentrations of dust are expected to exceed exposure limits.

Thermal Hazard Protection: Wear suitable protective clothing.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	:	Solid
Appearance	:	Black,Powder
Odor	:	(Vanilla)
Odor Threshold	:	Not available
pH	:	Neutral
Relative Evaporation Rate (butylacetate=1)	:	Not available
Melting Point	:	Not available
Freezing Point	:	Not available
Boiling Point	:	Not available
Flash Point	:	Not available
Auto-ignition Temperature	:	Not available
Decomposition Temperature	:	Not available
Flammability (solid, gas)	:	Not available
Lower Flammable Limit	:	Not available
Upper Flammable Limit	:	Not available
Vapor Pressure	:	Not available
Relative Vapor Density at 20 °C	:	Not available
Relative Density	:	Not available
Specific Gravity	:	Not available
Solubility	:	Not available
Log Pow	:	Not available
Log Kow	:	Not available
Viscosity, Kinematic	:	Not available
Viscosity, Dynamic	:	Not available
Explosion Data – Sensitivity to Mechanical Impact	:	Not available
Explosion Data – Sensitivity to Static Discharge	:	Not available

SECTION 10: STABILITY AND REACTIVITY

Reactivity: Hazardous reactions will not occur under normal conditions. Dust clouds can be explosive.

Chemical Stability: Dust clouds can be explosive

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Direct sunlight. Extremely high or low temperatures. Open flame. Ignition sources. Incompatible materials

Incompatible Materials: Strong acids. Strong bases. Strong oxidizers

Hazardous Decomposition Products: Carbon oxides (CO, CO2). Sulfur oxides. Sodium oxides. Barium oxides.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity : Not classified

LD50 and LC50 Data Not available

Skin Corrosion/Irritation: Not classified pH: neutral

Serious Eye Damage/Irritation: Not classified **pH:** neutral

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not available

Carcinogenicity: Suspected of causing cancer.

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Aspiration Hazard: Not classified

Symptoms/Injuries After Inhalation: Prolonged contact with large amounts of dust may cause mechanical irritation.

Symptoms/Injuries After Skin Contact: Prolonged contact with large amounts of dust may cause mechanical irritation.

Symptoms/Injuries After Eye Contact: Repeated or prolonged contact will cause mechanical irritation.

Symptoms/Injuries After Ingestion: If a large quantity has been ingested : Gastrointestinal irritation. May cause nausea, vomiting, and diarrhea.

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data

Carbon black (1333-86-4)	
LD50 Oral Rat	> 15400 mg/kg
LD50 Dermal Rabbit	> 3 g/kg

Carbon black (1333-86-4)	
IARC Group	2B

SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Carbon black (1333-86-4)	
LC50 Fish 1	5601 mg/l
EC50 Daphnia 1	> 5600 mg/l (Exposure time: 24 h - Species: Daphnia magna)

Sodium ligno sulfonate (8061-51-6)	
LC50 Fish 1	7300 mg/l (Exposure time: 48 h - Species: Oncorhynchus mykiss)

Persistence and Degradability Not available

Bioaccumulative Potential Not available

Mobility in Soil Not available

Other Adverse Effects Avoid release to the environment

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Dispose of waste material in accordance with all local, regional, national, provincial, territorial and international regulations.

SECTION 14: TRANSPORT INFORMATION

In Accordance With ICAO/IATA/DOT/TDG

UN Number Not regulated for transport

UN Proper Shipping Name Not regulated for transport

Additional Information Not regulated for transport

Transport by sea Not regulated for transport

Air transport Not regulated for transport

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Carbon black (1333-86-4)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Barium sulfate (7727-43-7)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

Sodium ligno sulfonate (8061-51-6)
Listed on the United States TSCA (Toxic Substances Control Act) inventory

US State Regulations

Carbon black (1333-86-4)	
U.S. - California - Proposition 65 - Carcinogens List	WARNING: This product contains chemicals known to the State of California to cause cancer.

Carbon black (1333-86-4)
U.S. - California - Toxic Air Contaminant List (AB 1807, AB 2728)
U.S. - Connecticut - Hazardous Air Pollutants - HLVs (30 min)
U.S. - Connecticut - Hazardous Air Pollutants - HLVs (8 hr)
U.S. - Hawaii - Occupational Exposure Limits - STELs
U.S. - Hawaii - Occupational Exposure Limits - TWAs
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Acceptable Ambient Concentrations
U.S. - Idaho - Non-Carcinogenic Toxic Air Pollutants - Emission Levels (ELs)
U.S. - Idaho - Occupational Exposure Limits - TWAs
U.S. - Illinois - Toxic Air Contaminant Carcinogens
U.S. - Illinois - Toxic Air Contaminants
U.S. - Maine - Chemicals of High Concern
U.S. - Massachusetts - Right To Know List
U.S. - Michigan - Occupational Exposure Limits - TWAs
U.S. - Minnesota - Chemicals of High Concern
U.S. - Minnesota - Hazardous Substance List
U.S. - Minnesota - Permissible Exposure Limits - TWAs
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - New Jersey - Special Health Hazards Substances List
U.S. - New York - Occupational Exposure Limits - TWAs
U.S. - North Dakota - Air Pollutants - Guideline Concentrations - 8-Hour
U.S. - Oregon - Permissible Exposure Limits - TWAs
U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - Tennessee - Occupational Exposure Limits - TWAs
U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term
U.S. - Vermont - Permissible Exposure Limits - TWAs
U.S. - Washington - Permissible Exposure Limits - STELs
U.S. - Washington - Permissible Exposure Limits - TWAs
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 25 Feet to Less Than 40 Feet
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 40 Feet to Less Than 75 Feet
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights 75 Feet or Greater
U.S. - Wisconsin - Hazardous Air Contaminants - All Sources - Emissions From Stack Heights Less Than 25 Feet

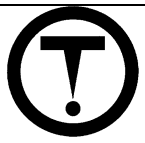
Barium sulfate (7727-43-7)
U.S. - Hawaii - Occupational Exposure Limits - TWAs
U.S. - Idaho - Occupational Exposure Limits - TWAs
U.S. - Massachusetts - Right To Know List
U.S. - Michigan - Occupational Exposure Limits - TWAs
U.S. - Minnesota - Hazardous Substance List
U.S. - Minnesota - Permissible Exposure Limits - TWAs
U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - 24-Hour
U.S. - New Hampshire - Regulated Toxic Air Pollutants - Ambient Air Levels (AALs) - Annual
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - North Dakota - Air Pollutants - Guideline Concentrations - 8-Hour
U.S. - Oregon - Permissible Exposure Limits - TWAs
U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - Tennessee - Occupational Exposure Limits - TWAs
U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term

U.S. - Vermont - Permissible Exposure Limits - TWAs
U.S. - Washington - Permissible Exposure Limits - STELs
U.S. - Washington - Permissible Exposure Limits - TWAs

Sodium ligno sulfonate (8061-51-6)
U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term

Canadian Regulations

Negative Expander	
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects



Carbon black (1333-86-4)	
Listed on the Canadian DSL (Domestic Substances List) inventory.	
Listed on the Canadian Ingredient Disclosure List	
WHMIS Classification	Class D Division 2 Subdivision A - Very toxic material causing other toxic effects

Barium sulfate (7727-43-7)	
Listed on the Canadian DSL (Domestic Substances List) inventory.	
WHMIS Classification	Uncontrolled product according to WHMIS classification criteria

Sodium ligno sulfonate (8061-51-6)
Listed on the Canadian DSL (Domestic Substances List) inventory.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by CPR.

SECTION 16: OTHER INFORMATION

Revisions date : 09/10/2013

Other Information : This document has been prepared in accordance with the SDS requirements of the OSHA Hazard Communication Standard 29 CFR 1910.1200

GHS Full Text Phrases:

Acute Tox. Not classified (Dermal)	Acute toxicity (dermal) Not classified
Acute Tox. Not classified (Oral)	Acute toxicity (oral) Not classified
Carc. 2	Carcinogenicity Category 2
Comb. Dust	Combustible Dust
H351	Suspected of causing cancer

Party Responsible for the Preparation of This Document

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

North America GHS US 2012 & WHMIS