

Kinepak Solid

Safety Data Sheet

according to HCS 29 CFR 1910.1200 Appendix D
Revision Date 12/07/19



Supersedes Version 1

Version 1.1

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

Product Identifier

Product Name: Kinepak Solid

Intended Use of the Product

Detonating agent. For professional use only.

Name, Address, and Telephone of the Responsible Party

USA:

Dimension Supply, Inc.
1034 Oak Grove Rd.
Morrisdale, PA 16858
1-814-343-4700

Emergency Telephone Numbers

Emergency number **USA:** 1-800-633-8253 (PERS) Customer #10351

IN THE U.S. FOR CHEMICAL EMERGENCIES (24 HOUR) INVOLVING TRANSPORTATION, SPILL, LEAK, RELEASE, FIRE OR ACCIDENTS: **CALL: PERS 1-800-633-8253. Customer #10351**

IN THE U.S.: FOR LOST, STOLEN, OR MISPLACED EXPLOSIVES CALL: **BATF 1-800-800-3855.**

FORM ATF F 5400.5 MUST BE COMPLETED AND LOCAL AUTHORITIES (STATE/MUNICIPAL POLICE, ETC.) MUST BE ADVISED.

SECTION 2: HAZARDS IDENTIFICATION

Classification of the Substance or Mixture

Classification (GHS-US)

Ox. Sol. 3 H272

Eye Irrit. 2A H319

Carc. 1B H350

Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US):



GHS03



GHS07



GHS08

Signal Word (GHS-US):

Danger

Hazard Statements (GHS-US):

H272 - May intensify fire; oxidizer

H319 - Causes serious eye irritation

H350 - May cause cancer (Inhalation)

Precautionary Statements (GHS-US):

P201 - Obtain special instructions before use.

P202 - Do not handle until all safety precautions have been read and understood.

P210 - Keep away from heat, hot surfaces, open flames, sparks - No smoking.

P220 - Keep/Store away from combustible materials, clothing, combustibles.

P221 - Take any precaution to avoid mixing with clothing, combustible materials, combustibles.

P264 - Wash hands, forearms, and exposed areas thoroughly after handling.

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P280 - Wear eye protection, protective clothing, protective gloves.
P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313 - If exposed or concerned: Get medical advice/attention.
P337+P313 - If eye irritation persists: Get medical advice/attention.
P370+P378 - In case of fire: Use water in large amounts, water spray for extinction.
P405 - Store locked up.
P501 - Dispose of contents/container according to local, regional, national, territorial, provincial, and international regulations

Other Hazards Ingestion may cause methemoglobinemia. Initial manifestation of methemoglobinemia is cyanosis, characterized by navy lips, tongue and mucous membranes, with skin color being slate grey. Further manifestation is characterized by headache, weakness, dyspnea, dizziness, stupor, respiratory distress and death due to anoxia. If ingested, nitrates may be reduced to nitrites by bacteria in the digestive tract. Signs and symptoms of nitrite poisoning include methemoglobinemia, nausea, dizziness, increased heart rate, hypotension, fainting and, possibly shock.

Aquatic Acute 3 H402

H402 - Harmful to aquatic life

P273 – Avoid release to the environment

Unknown Acute Toxicity (GHS-US)

Not available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mixture

Name	Product identifier	% (w/w)	Classification (GHS-US)
Ammonium nitrate	(CAS No) 6484-52-2	90 - 95	Ox. Sol. 3, H272 Eye Irrit. 2A, H319
Glass, oxide	(CAS No) 65997-17-3	5 - 10	Carc. 1B, H350

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 if possible).

Inhalation: When symptoms occur: go into open air and ventilate suspected area. Keep at rest and in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.

Skin Contact: Remove contaminated clothing. Gently wash with plenty of soap and water followed by rinsing with water for at least 15 minutes. Call a POISON CENTER or doctor/physician if you feel unwell. Wash contaminated clothing before reuse.

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

Ingestion: Immediately call a POISON CENTER or doctor/physician. Rinse mouth. Do NOT induce vomiting. If spontaneous vomiting occurs, have victim lean forward with head positioned to avoid breathing in of vomit, rinse mouth and have victim drink plenty of water. Never give anything by mouth to an unconscious person.

Most Important Symptoms and Effects Both Acute and Delayed

General: Causes serious eye irritation.

Inhalation: May cause irritation to the respiratory tract, sneezing, coughing, burning sensation of throat with constricting sensation of the larynx and difficulty in breathing.

Skin Contact: May cause mild skin irritation.

Eye Contact: Causes serious eye irritation.

Ingestion: May be harmful if swallowed.

Chronic Symptoms: May cause cancer.

Indication of Any Immediate Medical Attention and Special Treatment Needed

If exposed or concerned, get medical advice and attention. Causes methemoglobinemia – emergency response should treat appropriately, such as by intravenous administration of methylene blue.

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SECTION 5: FIREFIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media: Water spray, fog (flooding amounts).

Unsuitable Extinguishing Media: Do not use any extinguishing agent other than water.

Special Hazards Arising From the Substance or Mixture

Fire Hazard: Not itself combustible but assists fire in burning materials (oxidizing). May be explosive under certain conditions. Rate of burning: will accelerate burning. After fire has started, this product will continue to burn in the absence of air.

Explosion Hazard: Heat may build pressure, rupturing closed containers, spreading fire and increasing risk of burns and injuries. This product is a detonating agent and may cause an explosion under conditions of heat, shock, pressure, or friction.

Reactivity: Accelerates the rate of burning materials. Oxidizer.

Advice for Firefighters

Precautionary Measures Fire: Exercise caution when fighting any chemical fire.

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

Hazardous Combustion Products: Carbon oxides (CO, CO₂). Nitrogen oxides. Ammonium nitrate fumes.

Firefighting Instructions: In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of 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: Do not get in eyes, on skin, or on clothing. Do not breathe dust or fumes. Keep away from heat, sparks, open flames, hot surfaces – No smoking. Eliminate every possible source of ignition. Evacuate danger area.

For Non-Emergency Personnel

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

Emergency Procedures: Evacuate danger area

For Emergency Personnel

Protective Equipment: Equip cleanup crew with proper protection.

Emergency Procedures: Evacuate unnecessary personnel. Stop leak if safe to do so. Eliminate ignition sources. Ventilate area.

Environmental Precautions

Prevent entry to sewers and public waters. Hazardous waste due to potential risk of explosion.

Methods and Material for Containment and Cleaning Up

For Containment: Absorb and/or contain spill with inert material, then place in suitable container.

Methods for Cleaning Up: Use only non-sparking tools. Be careful to avoid shock, friction, and contact with grit. Collect product for recovery or disposal. For release to land, contain discharge by constructing dykes or applying inert absorbent; for release to water, utilize damming and/or water diversion to minimize the spread of contamination. Collect contaminated soil and water, and absorbent for proper disposal. Notify applicable government authority if release is reportable or could adversely affect the environment.

Reference to Other Sections

See heading 8, Exposure Controls and Personal Protection.

SECTION 7: HANDLING AND STORAGE

Precautions for Safe Handling

Hygiene Measures: This product has the potential to be an explosive and should only be used under the supervision of trained and licensed personnel. 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.

Conditions for Safe Storage, Including Any Incompatibilities

Technical Measures: Proper grounding procedures to avoid static electricity should be followed. Sensitive to mechanical impact when mixed with organic materials. Store as defined in the Explosives Act of Canada and the provisions of the Bureau of Alcohol, Tobacco and Firearms regulations contained in 27 CFR part 555.

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Storage Conditions: Store under moderate temperatures recommended by a technical services representative. Store under dry conditions in a well ventilated magazine that has been approved for either detonator storage or explosive storage. Do NOT store explosives in a detonator magazine or detonators in an explosive magazine. Keep away from heat, spark and flames. Keep containers closed. Explosives should be kept well away from initiating explosives; protected from physical damage; separated from oxidizing materials, combustibles, and sources of heat. Isolate from incompatibles. Ideal storage temperature: 10-27°C (50-80°F).

Special Rules on Packaging: Keep only in the original container.

Specific End Use(s)

Detonating agent. For professional use only.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Control Parameters

Ammonium nitrate (6484-52-2)		
	Internal TWA (mg/m ³)	5 mg/m ³
Glass, oxide (65997-17-3)		
USA OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ total dust, 5 mg/m ³ , respirable fraction 8 hr
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	3 fibers/cm ³ (fibers ≤3.5 μm in diameter & ≥10μm in length), TWA 5mg/m ³ (total)

Exposure Controls

Appropriate Engineering Controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Proper grounding procedures to avoid static electricity should be followed. Product to be handled in a closed system and under strictly controlled conditions. Ensure all national/local regulations are observed.

Personal Protective Equipment: Gloves. Protective clothing. Dust/aerosol mask. Safety glasses.



Materials for Protective Clothing: Wear fire/flame resistant/retardant clothing.

Hand Protection: Wear chemically resistant protective gloves.

Eye Protection: Chemical goggles or safety glasses.

Skin and Body Protection: Wear suitable protective clothing. Wear long sleeves.

Respiratory Protection: Use a NIOSH-approved respirator or self-contained breathing apparatus whenever exposure may exceed established Occupational Exposure Limits.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Information on Basic Physical and Chemical Properties

Physical State	: Solid
Appearance	: White granular
Odor	: Odorless
Odor Threshold	: Not available
pH	: 5 - 6
Relative Evaporation Rate (butylacetate=1)	: Not available
Melting Point	: 160 - 165°C/ 320 - 329°F
Freezing Point	: Not available
Boiling Point	: 210°C/ 410°F
Flash Point	: Not available
Auto-ignition Temperature	: Not available
Decomposition Temperature	: 210 °C (410 °F)
Flammability (solid, gas)	: Not available
Lower Flammable Limit	: Not available
Upper Flammable Limit	: Not available
Vapor Pressure	: Not available

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Relative Vapor Density at 20 °C	: Not available
Relative Density	: Not available
Specific Gravity	: Not available
Solubility	: 79% @25°C in water
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: Accelerates the rate of burning materials. Oxidizer.

Chemical Stability: Stable at standard temperature and pressure. Ammonium Nitrate will spontaneously decompose at 210°C (410°F). Extreme risk of explosion by shock, friction, fire or other sources of ignition.

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Keep away from open flames, hot surfaces and sources of ignition.

Incompatible Materials: Oxidizable materials, metal powder, bronze & copper alloys, fuels (e.g. lubricants, machine oils), fluorocarbon lubricants, acids, corrosive liquids, chlorate, sulphur, sodium nitrite, charcoal, coke and other finely divided combustibles. Strong oxidizing and reducing agents.

Hazardous Decomposition Products: Carbon oxides (CO, CO₂), hydrocarbons, nitrogen oxides. At temperatures above 210°C, decomposition may be explosive, especially if confined.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on Toxicological Effects - Product

Acute Toxicity: Not classified

LD50 and LC50 Data: Not available

Skin Corrosion/Irritation: Not classified

Serious Eye Damage/Irritation: Causes serious eye irritation.

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Teratogenicity: Not available

Carcinogenicity: May cause cancer (Inhalation).

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: May cause irritation to the respiratory tract, sneezing, coughing, burning sensation of throat with constricting sensation of the larynx and difficulty in breathing.

Symptoms/Injuries After Skin Contact: May cause mild skin irritation.

Symptoms/Injuries After Eye Contact: Causes serious eye irritation.

Symptoms/Injuries After Ingestion: May be harmful if swallowed.

Chronic Symptoms: May cause cancer. _

Information on Toxicological Effects - Ingredient(s)

LD50 and LC50 Data

Ammonium nitrate (6484-52-2)	
LD50 Oral Rat	2217 mg/kg
LC50 Inhalation Rat (mg/l)	> 88.8 mg/l (Exposure time: 4 h)

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SECTION 12: ECOLOGICAL INFORMATION

Toxicity

Ammonium nitrate (6484-52-2)

LC50 Fish 1	65 - 85 mg/l (Exposure time: 48 h - Species: Cyprinus carpio [semi-static])
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Persistence and Degradability Not available

Bioaccumulative Potential

Ammonium nitrate (6484-52-2)

BCF fish 1	(no bioaccumulation expected)
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Log Pow	-3.1 (at 25 °C)
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Mobility in Soil Not available

Other Adverse Effects

Other Information: Avoid release to the environment.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Recommendations: Destroy and dispose of in accordance with applicable local, state, provincial, territorial, federal and international regulations. Comply with regulations as defined in the Explosives Act of Canada and the provisions of the Bureau of Alcohol, Tobacco and Firearms regulations contained in 27 CFR part 555.

Ecology – Waste Materials: Hazardous waste due to toxicity.

SECTION 14: TRANSPORT INFORMATION

In Accordance With ICAO/IATA/DOT/TDG

UN Number

UN-No.(DOT): 1942

UN Proper Shipping Name

DOT Proper Shipping Name

: Ammonium nitrate

with not more than 0.2% total combustible material, including any organic substance, calculated as carbon to the exclusion of any other added substance

Hazard Labels (DOT)

: 5.1 - Oxidizer



Packing Group (DOT)

: III - Minor Danger

Additional Information

Emergency Response Guide (ERG) Number

: 140

SECTION 15: REGULATORY INFORMATION

US Federal Regulations

Kinepak Solid

SARA Section 311/312 Hazard Classes

Delayed (chronic) health hazard
Fire hazard

Ammonium nitrate (6484-52-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

Glass, oxide (65997-17-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

US State Regulations

Ammonium nitrate (6484-52-2)

U.S. - California - Toxic Air Contaminant List (AB 1807, AB 2728)

U.S. - Delaware - Accidental Release Prevention Regulations - Sufficient Quantities

U.S. - Delaware - Pollutant Discharge Requirements - Reportable Quantities

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U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 1
U.S. - Massachusetts - Oil & Hazardous Material List - Groundwater Reportable Concentration - Reporting Category 2
U.S. - Massachusetts - Oil & Hazardous Material List - Reportable Quantity
U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 1
U.S. - Massachusetts - Oil & Hazardous Material List - Soil Reportable Concentration - Reporting Category 2
U.S. - Massachusetts - Right To Know List
U.S. - New Jersey - Right to Know Hazardous Substance List
U.S. - New Jersey - Special Health Hazards Substances List
U.S. - Pennsylvania - RTK (Right to Know) - Environmental Hazard List
U.S. - Pennsylvania - RTK (Right to Know) List
U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term

Glass, oxide (65997-17-3)

U.S. - Connecticut - Hazardous Air Pollutants - HLVs (30 min)
U.S. - Connecticut - Hazardous Air Pollutants - HLVs (8 hr)
U.S. - Minnesota - Hazardous Substance List
U.S. - Texas - Effects Screening Levels - Long Term
U.S. - Texas - Effects Screening Levels - Short Term

Canadian Regulations

Kinepak Solid

WHMIS Classification	Note: Explosives are not regulated under WHMIS. They are subject to the regulations of the Explosives Act of Canada. Class C - Oxidizing Material Class D Division 2 Subdivision B - Toxic material causing other toxic effects
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Ammonium nitrate (6484-52-2)

Listed on the Canadian DSL (Domestic Substances List) inventory.

WHMIS Classification	Class C - Oxidizing Material
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Glass, oxide (65997-17-3)

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

Indication of Changes : 09/17/2013

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:

Carc. 1B	Carcinogenicity Category 1B
Eye Irrit. 2A	Serious eye damage/eye irritation Category 2A
Ox. Sol. 3	Oxidizing solids Category 3
H272	May intensify fire; oxidizer
H319	Causes serious eye irritation
H350	May cause cancer

Party Responsible for the Preparation of This Document

Dimension Supply, Inc.
Morrisdale, PA 16858

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The information contained herein is provided only as a guide for the handling of this specific material and has been prepared in good faith by technically knowledgeable personnel. This Material Safety Data Sheet is not all-inclusive. The circumstances of use and handling may involve additional considerations that have not been addressed by this Data Sheet. No warranty of any kind is provided or implied by this Data Sheet. Dimension Supply, Inc will not be liable for any damages, losses, injuries or indirect damages that may result from the use of, or reliance on, any information contained herein.

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