



SAFETY DATA SHEET

CPI-GEORGIA

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Version 1.0

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Section 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifiers

Product name: Ammonium nitrate-(¹⁵N₂)
Product Number: NSC-103
Brand: CPI Georgia
CAS-No.: 43086-60-8
Formula: ¹⁵NH₄¹⁵NO₃

1.2 Recommended use of the chemical and restrictions on use

For research use only. Not intended for diagnostic or therapeutic use.

1.3 Details of the supplier of the safety data sheet

Company: CPI Georgia
46 Petre Kavtaradze Street,
Tbilisi, Georgia, 0186

Telephone: +995-322-303-495
Fax: +995-322-303-495
E-mail address: Info@cpigeorgia.ge

Section 2: Hazards identification

2.1 Classification

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Ox. Sol. 3 H272
Skin Irrit. 2 H315
Eye Irrit. 2 H319
STOT SE 3 H335

2.2 Labeling according to Regulation (EC) No. 1272/2008 [CLP]

Pictogram:



Signal word:

Warning

Hazard statement(s):

H272 - May intensify fire; oxidizer
H315 - Causes skin irritation
H319 - Causes serious eye irritation.
H335 - May cause respiratory irritation

Precautionary statement(s):

P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
 P220 - Keep/Store away from combustible materials, combustibles
 P221 - Take any precaution to avoid mixing with combustible materials
 P261 - Avoid breathing dust, fume, gas, mist, spray, vapors
 P264 - Wash Both hands thoroughly after handling
 P271 - Use only outdoors or in a well-ventilated area
 P280 - Wear protective clothing, protective gloves
 P302+P352 - IF ON SKIN: Wash with plenty of water

2.3 Other Hazards

No additional information available.

Section 3: Composition/ Information on Ingredients**3.1 Substances**

Formula: H₄¹⁵N₂O₃
 Molecular weight: 82.03 g/mol
 CAS-No.: 43086-60-8

Chemical Name	CAS#	Weight-%	GHS-US classification
Ammonium nitrate-(¹⁵ N ₂)	43086-60-8	>99%	Ox. Sol. 3, H272 Skin Irrit. 2, H315 Eye Irrit. 2, H319 STOT SE 3, H335

Section 4: First-Aid Measures**4.1 First Aid Measures**

General advice:

If symptoms persist, call a physician. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing.

Eye contact:

Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. If symptoms persist, call a physician. Rinse thoroughly with plenty of water for at least 15 minutes, lifting lower and upper eyelids. Consult a physician.

Skin Contact:

Consult a physician if necessary. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. Immediate medical attention is not required. If skin irritation persists, call a physician.

Inhalation:

Remove to fresh air Call a physician If breathing is irregular or stopped, administer artificial respiration

Ingestion:

Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation Immediate medical attention is not required Move to fresh air in case of accidental inhalation of vapors If symptoms persist, call a physician.

Rinse mouth. Drink plenty of water. If symptoms persist, call a physician. Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Call a physician.

Self-protection of the first aider:

Use personal protective equipment as required.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

Section 5: Fire-Fighting Measures

5.1 Extinguishing media

Suitable extinguishing media:

Use water spray, alcohol-resistant foam, dry chemical, or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

No data available.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

5.4 Further information

No data available.

Section 6: Accidental Release Measures

6.1 Personal precautions, protective equipment, and emergency procedures

Personal precautions:

Use personal protective equipment as required. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

6.2 Environmental precautions

Environmental precautions:

Prevent entry into waterways, sewers, basements, or confined areas. Do not flush into surface water or sanitary sewer system. Prevent further leakage or spillage if safe to do so. Prevent product from entering drains. See Section 12 for additional Ecological Information.

6.3 Methods and material for containment and cleaning up

Methods for containment:

Methods for cleaning up:

Prevent further leakage or spillage if safe to do so. Use personal protective equipment as required. Cover powder spill with plastic sheet or tarp to minimize spreading and keep powder dry. Take up mechanically, placing in appropriate containers for disposal. Avoid creating dust. Clean contaminated surface thoroughly. Soak up with inert absorbent material. Dam up. Pick up and transfer to properly

labeled containers. Sweep up and shovel into suitable containers for disposal. After cleaning, flush away traces with water. Take precautionary measures against static discharges.

Section 7: Handling and Storage

7.1 Precautions for safe handling

Additional hazards when processed:

Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Keep away from sources of ignition- No smoking. Keep away from combustible material. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Hygiene measures:

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place.

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

Section 8: Exposure Controls/Personal Protection

8.1 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.1.1 Personal protective equipment

Eye/face protection

Safety glasses with side-shields conforming to EN166 Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Complete suit protecting against chemicals, the type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

For nuisance exposures use type P95 (US) or type P1 (EU EN 143) particle respirator. For higher level protection use type OV/AG/P99 (US) or type ABEK-P2 (EU EN 143) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Discharge into the environment must be avoided.

Section 9: Physical and Chemical Properties**9.1 Information on basic physical and chemical properties**

Physical State:	Solid
Appearance:	Crystalline Solid
Odor:	No information available

Property**Values**

pH	4.5 - 6.0 at 80.40 g/l at 25 °C
Melting point/freezing point	169 °C
Boiling point	210 °C
Flash point	No information available
Density	1.72 g/cm ³ at 20 °C
Evaporation rate	No information available
Upper flammability limits	No information available
Lower flammability limits	No information available
Vapor pressure	No information available
Vapor density	No information available
Specific gravity	No information available
Water solubility	No information available
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Kinematic viscosity	No information available
Explosive properties	No information available
Oxidizing properties	The substance or mixture is classified as oxidizing with the Category 1.

Section 10: Stability and Reactivity**10.1 Reactivity**

No data available.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available.

10.4 Conditions to avoid

No data available.

10.5 Incompatible materials

Reducing agents, Powdered metals, Strong acids.

10.6 Hazardous decomposition products

Nitrogen oxides

Section 11: Toxicological Information**11.1 Information on likely routes of exposure**

Inhalation:	No data available.
Eye contact:	No data available.
Skin Contact:	No data available.

11.2 Information on toxicological effects

LD50 Oral - Rat - male and female - 2.950 mg/kg

(OECD Test Guideline 401)

The value is given in analogy to the following substances: Ammonium nitrate

Inhalation: Irritating to respiratory system.

Dermal: No data available

11.3 Delayed and immediate effects as well as chronic effects from short and long-term exposure

Chronic Toxicity:

Avoid repeated exposure.

Section 12: Ecological Information

12.1 Toxicity

No data available.

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

No data available.

Section 13: Disposal Considerations

Disposal of wastes:

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated packaging:

Do not reuse container.

Section 14: Transport Information

14.1 UN number

ADR/RID: 1942 IMDG: 1942 IATA: 1942

14.2 UN proper shipping name

ADR/RID: AMMONIUM NITRATE

IMDG: AMMONIUM NITRATE

IATA: Ammonium nitrate

14.3 Transport hazard class(es)

ADR/RID: 5.1 IMDG: 5.1 IATA: 5.1

14.4 Packaging group

ADR/RID: III IMDG: III IATA: III

14.5 Environmental hazards

ADR/RID: no IMDG Marine pollutant: no IATA: no

14.6 Special precautions for user

No data available

Section 15: Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006.

National legislation

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

: OXIDISING LIQUIDS AND SOLIDS

Other regulations

Take note of Dir 94/33/EC on the protection of young people at work.

15.2 Chemical Safety Assessment

For this product a chemical safety assessment was not carried out

Section 16: Other Information**Disclaimer**

The information provided in this Material Safety Data Sheet is correct to the best of our knowledge, information, and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.