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J. T. Baker Chemical Co.222 Red School Lane Phillipsburg, N.J. 08865
24-Hour Emergency Telephone -- (201) 859-2151Chemtrec # (800) 424-9300
National Response Center # (800) 424-880287-7560
87-7562**MATERIAL
SAFETY DATA
SHEET**N3660 -01
Effective: 10/01/85

Nitric Acid

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Issued: 10/01/85

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SECTION I - PRODUCT IDENTIFICATION

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Product Name: Nitric Acid
Formula: HNO₃
Formula Wt: 63.01
CAS No.: 07697-37-2
NIOSH/RTECS No.: Q05775000
Common Synonyms: Hydrogen Nitrate
Product Codes: 4801,9605,9602,9598,9606,9601,5371,9597,9600,5113,9616
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PRECAUTIONARY LABELLING

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BAKER SAF-T-DATATM System

Laboratory Protective Equipment

Precautionary Label Statements

POISON! DANGER!

STRONG OXIDIZER - CONTACT WITH OTHER MATERIAL MAY CAUSE FIRE
LIQUID AND VAPOR CAUSE SEVERE BURNS - MAY BE FATAL IF SWALLOWED

HARMFUL IF INHALED AND MAY CAUSE DELAYED LUNG INJURY

SPILLAGE MAY CAUSE FIRE OR LIBERATE DANGEROUS GAS

Keep from contact with clothing and other combustible materials. Do not store near combustible materials. Do not get in eyes, on skin, on clothing. Avoid breathing vapor. Keep in tightly closed container. Use with adequate ventilation. Wash thoroughly after handling. In case of fire, flood with water. Flush spill area with water spray.

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SECTION II - HAZARDOUS COMPONENTS

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Component	%	CAS No.
Nitric Acid	65-75	7697-37-2

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SECTION IX - STORAGE AND HANDLING PRECAUTIONS

SAF-T-DATATM Storage Color Code: Yellow

Special Precautions

Keep container tightly closed. Store separately and away from flammable and combustible materials.

SECTION X - TRANSPORTATION DATA AND ADDITIONAL INFORMATION

DOMESTIC (D.O.T.)

Proper Shipping Name	Nitric acid (over 40%)
Hazard Class	Oxidizer
UN/NA	UN2031
Labels	OXIDIZER, CORROSIVE
Reportable Quantity	1000 LBS.

INTERNATIONAL (I.M.O.)

Proper Shipping Name	Nitric acid
Hazard Class	8
UN/NA	UN2031
Labels	CORROSIVE

N/A = Not Applicable or Not Available

The information published in this Material Safety Data Sheet has been compiled from our experience and data presented in various technical publications. It is the user's responsibility to determine the suitability of this information for the adoption of necessary safety precautions. We reserve the right to revise Material Safety Data Sheets periodically as new information becomes available.



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SECTION III - PHYSICAL DATA

Boiling Point: 120°C (248°F) Vapor Pressure(mmHg): 2.9
Melting Point: -42°C (-44°F) Vapor Density(air=1): 2.5
Specific Gravity: 1.50 Evaporation Rate: N/A
(H₂O=1) (Butyl Acetate=1)
Solubility(H₂O): Complete (in all proportions) % Volatiles by Volume: 100

Appearance & Odor: Colorless liquid, with choking odor.

SECTION IV - FIRE AND EXPLOSION HAZARD DATA

Flash Point: N/A NFPA 704M Rating: 3-0-0 OXY

Fire Extinguishing Media

Use water spray.

Special Fire-Fighting Procedures

Firefighters should wear proper protective equipment and self-contained breathing apparatus with full facepiece operated in positive pressure mode. Move containers from fire area if it can be done without risk. Use water to keep fire-exposed containers cool.

Unusual Fire & Explosion Hazards

Strong oxidizer. Contact with other material may cause fire.

Toxic Gases Produced

nitrogen oxides

SECTION V - HEALTH HAZARD DATA

Threshold Limit Value (TLV/TWA): 5 mg/m³ (2 ppm)

Short-Term Exposure Limit (STEL): 10 mg/m³ (4 ppm)

Effects of Overexposure

Liquid may cause severe burns to skin and eyes.
Inhalation of vapors may cause severe irritation of the respiratory system.
Inhalation of vapors may cause coughing, chest pains, difficulty breathing, or unconsciousness.
Ingestion may be fatal.

Emergency and First Aid Procedures

If swallowed, do NOT induce vomiting. Give water, milk, or milk of magnesia.

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SECTION V - HEALTH HAZARD DATA (Continued)

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

In case of contact, immediately flush eyes or skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes.

SECTION VI - REACTIVITY DATA

Stability: Stable

Hazardous Polymerization: Will not occur

Conditions to Avoid: heat, light

Incompatibles: strong bases, combustible materials,
strong reducing agents

Decomposition Products: oxides of nitrogen

SECTION VII - SPILL AND DISPOSAL PROCEDURES

Steps to be taken in the event of a spill or discharge

Wear self-contained breathing apparatus and full protective clothing. Stop leak if you can do so without risk. Ventilate area. Neutralize spill with soda ash or lime. With clean shovel, carefully place material into clean, dry container and cover; remove from area. Flush spill area with water. Keep combustibles (wood, paper, oil, etc.) away from spilled material.

J. T. Baker Neutrasorb^R or Neutrasol^R "Low Na+" acid neutralizers are recommended for spills of this product.

Disposal Procedure

Dispose in accordance with all applicable federal, state, and local environmental regulations.

EPA Hazardous Waste Number: D002, D003 (Corrosive, Reactive Waste)

SECTION VIII - INDUSTRIAL PROTECTIVE EQUIPMENT

Ventilation: Use general or local exhaust ventilation to meet TLV requirements.

Respiratory Protection: Respiratory protection required if airborne concentration exceeds TLV. At concentrations up to 100 ppm, a chemical cartridge respirator with acid cartridge is recommended. Above this level, a self-contained breathing apparatus is advised.

Eye/Skin Protection: Safety goggles and face shield, uniform, protective suit, acid-resistant gloves are recommended.

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