

MATERIAL SAFETY DATA SHEET



LOVEJOY TOOL COMPANY, INC.
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Section 1	Product Information	Rev. Level: A	Page 1 of 4
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Trade Name and Synonyms: Penetrate Ultra

Chemical Family:

Formula:

Section 2	Product Description and Hazardous Ingredients/Identify Information
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Description: Chemical product for producing black oxide coating on steel.

DOT Class: Corrosive Solid N.O.S. (sodium hydroxide, dry solid) corrosive material UN 1759 RQ

<u>Hazardous Component</u>	<u>CAS Number</u>	<u>PEL(MG/M3)</u>	<u>TLV(MG/M3)</u>	<u>%</u>
Sodium Hydroxide	1310-73-2	2.0	2.0	80-90
Sodium Nitrate	7632-00-0	N.E.	N.E.	1-10
Sodium Nitrate	7631-99-4	N.E.	N.E.	10-20

N.E.: = Not Established

Section 3	Physical Data
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Boiling Point (F): Not applicable

Vapor Pressure (mm Hg): Not applicable

Vapor Density (Air=1): Not applicable

Solubility In H₂O: Complete

Appearance/Odor: Odorless, off-white powder

Specific Gravity (H₂O=1): 2.14

Melting Point: Not applicable

Evaporation Rate: Not applicable

pH: Not applicable

Section 4	Fire and Explosion Hazard Data
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Flash Point F: None

Extinguishing Media: Use flooding amounts of water.

Flammable Limits: None

Unusual Fire and Explosion Hazards: Contact with of some metals (i.e. aluminum, tin, zinc, etc.) may release flammable hydrogen gas. Contains oxidizer-increases the flammability of organics, combustibles and easily oxidizable materials.

Special Fire Fighting Procedures: Wear protective clothing with self-contained breathing apparatus.



Section 5**Health Hazard Data**

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Effects of Overexposure (Acute, Chronic): Contains STRONG ALKALI. Causes severe eye, skin and tissue burns. May be harmful or fatal if swallowed. Avoid contact with eyes, skin or clothing. Contains OXIDIZER-contact with other material may cause fire.

Usual Route(s) of Entry: Inhalation, ingestion

Emergency and First Aid Procedures

Inhalation: Move victim to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Eye Contact: Hold eyelids apart and flush with running water for at least 15 minutes. Get medical attention.

Skin Contact: Wash affected area with plenty of water. Remove contaminated clothing. If irritation or burns are present, get medical attention.

Ingestion: If conscious, give plenty of water. Do not induce vomiting. Get medical attention.

Section 6**Reactivity Data**

Stability: Considered Stable

Hazardous Polymerization: Not applicable

Conditions to Avoid: None

Hazardous Decomposition Products: Steam, hydrogen, oxides of nitrogen

Incompatibility: Strong acids, chlorinated hydrocarbons, leather, wool, metals such as aluminum, zinc, tin, brass, etc.

Section 7**Spill or Leak Procedures**

Steps to be taken in Case Material is Released or Spilled: Sweep up material into a chemical waste container. Neutralize spill area with a weak acid solution.

Waste Disposal Method: Dilute spent solutions 1:10 with water. Add Urea and mix well. Slowly add dilute acid till pH is between 7.5-8.5. Allow sludge to settle. Perform this procedure only in a well ventilated area.

Section 8**Special Protection Information**

Ventilation: Maintain below PEL, TLV

Protective Gloves: Rubber

Eye Protection: Safety goggles, face shield

Other Protective Equipment: Apron, boots, full cover work clothes

Work/Hygienic Practices: Wash thoroughly after handling, launder clothes

Respiratory Protection: Use NIOSH/MSHA approved respirator if dust, fumes or vapors are excessive.

Section 9**Special Precautions**

Precautions to be taken in Handling and Storing: Wear proper protective clothing when using this product. Wash thoroughly after handling. Use with adequate ventilation. When making a solution, add slowly to water with constant stirring. Store away from strong acids and combustibles.



Other Precautions: Emptied containers of this product may contain hazardous vapors and residues. Clean thoroughly before reusing or discarding. Do not use a welding torch to cut container. Do not use for water or food storage. This product will generate heat when mixed with water.

Section 10**Superfund Amendments and Reauthorization Act of 1986 (S.A.R.A.)**

HAZARDOUS COMPONENT	CERCLA RQ LBS.	SECT 302 TPQ LBS.	SECT 313 TOXIC	SECT 311/312 HAZARDS
Sodium Hydroxide	1000	N.A.	No	A,E
Sodium Nitrate	100	N.A.	No	A,C
Sodium Nitrate	N.A.	N.A.	No	A,C

A = Immediate (Acute) Health Hazard

C = Fire Hazard

E = Reactive Hazard

B = Delayed (Chronic) Health Hazard

D = Sudden Release of Pressure Hazard

Section 11**Disclaimer**

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IN CASE OF QUESTIONS PLEASE CALL

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