

PROD	DUCT	NAME:
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ABRO Liquid Polish Chrome and Metal PRODUCT NUMBER/SIZE: CP-880 / 8 oz.

Rev Date: 11/03/2015

SECTION 1

Identification of the Substance and of the Company/Undertaking

ABRO INDUSTRIES, INC.

MANUFACTURER'S NAME:

ADDRESS:

3580 Blackthorn Court South Bend, IN 46628 USA

PRODUCT DESCRIPTION: Liquid Polish

COMPANY PHONE: 574-232-8289

EMERGENCY 24-HR TELEPHONE:

Chemtrec: US/Canada 1-800-424-9300 International +1-703-527-3887

SECTION 2 Hazards Identification

Classification:

This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

GERM CELL MUTAGENICITY - Category 1B CARCINOGENICITY - Category 1A TOXIC TO REPRODUCTION (Fertility) - Category 2 TOXIC TO REPRODUCTION (Unborn child) - Category 2 SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) (central nervous system (CNS)) -Category 1

Label Pictogram(s):

	- ,-
Signal Word:	DANGER
Hazard Phrases:	May cause genetic defects. May cause cancer. Suspected of damaging fertility or the unborn child. Causes damage to organs through prolonged or repeated exposure. (central nervous system (CNS))
Precautionary Phrases:	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Wear protective gloves. Wear eye or face protection. Wear protective clothing. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.
Response:	IF exposed or concerned: Get medical attention if you feel unwell.
Storage / Disposal:	Store locked up. Dispose of contents and container in accordance with all local, regional, national and international regulations.



Other:

Keep out of reach of children.

SECTION 3 Composition/Information on Ingredients

Substance/mixture: Mixture

Ingredient name	%	CAS number
Distillates (petroleum), hydrotreated light	10-30	64742-47-8
Solvent naphtha (petroleum) heavy aliph.	5-10	64742-96-7
Amides, coco, N,N-bis(hydroxyethyl)	1-5	68603-42-9
Ammonia	0.1-1	1336-21-6
Diethanolamine	0.1-1	111-42-2

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

SECTION 4 First Aid Measures

EYE CONTACT: Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 20 minutes. Get medical attention.

SKIN CONTACT: Flush contaminated skin with plenty of water. Wash contaminated clothing thoroughly with water before removing it, or wear gloves. Continue to rinse for at least 20 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.

INHALATION: Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention if adverse health effects persist or are severe. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

INGESTION: Wash out mouth with water. Remove dentures if any. Remove victim to fresh air and keep at rest in a position comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Do not induce vomiting unless directed to do so by medical personnel. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Get medical attention if adverse health effects persist or are severe. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms and effects, both acute and delayed

Potential acute health effects

Eye contact : No known significant effects or critical hazards. **Inhalation :** No known significant effects or critical hazards.



Skin contact : No known significant effects or critical hazards. **Ingestion :** No known significant effects or critical hazards.

Over-exposure signs/symptoms

Eye contact : No known significant effects or critical hazards.

Inhalation: No known significant effects or critical hazards.

Skin contact: No known significant effects or critical hazards.

Ingestion: No known significant effects or critical hazards.

Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

Specific treatments: No specific treatment

Protection of first-aiders: No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

SECTION 5 Fire Fighting Measures

Suitable Extinguishing Media: Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media: None known.

Specific Hazards Arising from the Chemical: No specific fire or explosion hazard.

Hazardous thermal decomposition products

Decomposition products may include the following materials: carbon dioxide carbon monoxide metal oxide/oxides

Special protective actions for fire-fighters: No special measures are required.

Special protective equipment for fire-fighters: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

SECTION 6 Accidental Release Measures

Personal precautions, protective equipment and emergency procedures For non-emergency personnel:

No action shall be taken involving any personal risk or without suitable training. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".



Environmental precautions: Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

Spill: Stop leak if without risk. Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

SECTION 7 Handling and Storage

Precautions for safe handling

Protective measures: Put on appropriate personal protective equipment (see Section 8). Avoid exposure -obtain special instructions before use. Avoid exposure during pregnancy. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. See also Section 8 for additional information on hygiene measures. Remove contaminated clothing and protective equipment before entering eating areas.

Conditions for safe storage, including any incompatibilities: Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination.



SECTION 8 Exposure Controls/Personal Protection

Control parameters

Occupational exposure limits

Exposure limits
OSHA PEL (United States). TWA: 213 ppm
TWA: 1200 mg/m³
ACGIH TLV (United States, 3/2015). Absorbed through skin.
TWA: 200 mg/m ³ , (as total hydrocarbon vapor) 8 hours.
ACGIH TLV (United States).
TWA: 10 mg/m³ 8 hours.
ACGIH TLV (United States, 3/2015). Absorbed through skin.
TWA: 1 mg/m ³ 8 hours. Form: Inhalable fraction and vapor
NIOSH REL (United States, 10/2013). TWA: 15 mg/m³ 10 hours.
TWA: 13 mg/m 10 hours.
OSHA PEL 1989 (United States, 3/1989).
TWA: 15 mg/m ³ 8 hours.
TWA: 3 ppm 8 hours.

Appropriate engineering controls: If user operations generate dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.

Environmental exposure controls: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Individual protection measures

Hygiene measures: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with side-shields.

Skin protection

Hand protection: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Other skin protection: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection: Use a properly fitted, air-purifying or supplied air respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on



known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

SECTION 9 Physical and Chemical Properties

Appearance	
Physical state	Liquid
Color	Light Blue
Odor	Slight Ammonia
Odor threshold	NA
рН	9.34 [Conc. (% w/w): 100%]
Melting point	NA
Boiling point	Not available
Flash point	Closed cup: >93.333°C (>200°F)
Evaporation rate	NA
Flammability (solid, gas)	NA
Lower and upper explosive	NA
(flammable) limits	
Vapor pressure	NA
Vapor density	NA
Relative density	NA
Solubility	NA
Partition coefficient: n- octanol/water	NA
Auto-ignition temperature	NA
Decomposition temperature	NA
Viscosity	NA
Volatility	NA

SECTION 10 Stability and Reactivity

Reactivity

No specific test data related to reactivity available for this product or its ingredients.

Chemical stability

The product is stable.

Possibility of Hazardous Reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

Conditions to avoid

No specific data.

Incompatible materials

Reactive or incompatible with the following materials: oxidizing materials.

Hazardous Decomposition Products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.



SECTION 11 Toxicological Information

Informationontoxicologicaleffects

Acutetoxicity

Product/ingredient name	Result	Species	Dose	Exposure
Ammonia	LD50 Oral	Rat	350 mg/kg	-

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
Amides, coco, N,N-bis(hydroxyethyl)	Eyes - Severe irritant	Rabbit	-	100 µL	-
	Skin - Moderate irritant	Rabbit	-	300 µL	-
Ammonia	Eyes - Severe irritant	Rabbit	-	250 µg	-
	Eyes - Severe irritant	Rabbit	-	0.5 minutes 1 mg	-
Diethanolamine	Eyes - Severe irritant	Rabbit	-	24 hours 750 µg	-
	Eyes - Severe irritant	Rabbit	-	5500 mg	-
	Skin - Mild irritant	Rabbit	-	24 hours 500 mg	-
	Skin - Mild irritant	Rabbit	-	50 mg	-

Sensitization

There is no data available.

Carcinogenicity Classification

Product/ingredient name	OSHA	IARC	NTP	ACGIH	EPA	NIOSH
Aluminium oxide	-	-	-	A4	-	-
Distillates (petroleum), hydrotreated light	-	-	-	A3	-	-
Amides, coco, N,N-bis(hydroxyethyl)	-	2B	-	-	-	-
Diethanolamine	-	2B	-	A3	-	None

Specific target organ toxicity (single exposure)

Name	Category	Route of exposure	Target organs
Ammonia	Category 3	Not applicable.	Respiratory tract irritation

Specific target organ toxicity (repeated exposure)

Name	Category	Route of exposure	Target organs
Diethanolamine	Category 2	Not determined	Not determined

Aspiration hazard

Name	Result
	ASPIRATION HAZARD - Category 1 ASPIRATION HAZARD - Category 1



Information on the likely routes of exposure: Dermal contact. Eye contact. Inhalation. Ingestion.

Potential acute health effects

Eye contact : No known significant effects or critical hazards. **Inhalation :** No known significant effects or critical hazards. **Skin contact :** No known significant effects or critical hazards. **Ingestion :** No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : No known significant effects or critical hazards. **Inhalation** No known significant effects or critical hazards. **Skin contact** No known significant effects or critical hazards. **Ingestion** No known significant effects or critical hazards.

Delayed and immediate effects and also chronic effects from short and long term exposure Short term exposure

Potential immediate effects: No known significant effects or critical hazards. **Potential delayed effects :** No known significant effects or critical hazards.

Long term exposure

Potential immediate effects: No known significant effects or critical hazards. **Potential delayed effects :** No known significant effects or critical hazards.

Potential chronic health effects

General : No known significant effects or critical hazards.
Carcinogenicity : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.
Mutagenicity : No known significant effects or critical hazards.
Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

There is no data available.

SECTION 12 Ecological Information

Toxicity

Product/ingredient name	Result	Species	Exposure
Distillates (petroleum), hydrotreated light	Acute LC50 2200 µg/L Fresh water	Fish - Lepomis macrochirus	4 days
Ammonia	Acute EC50 0.66 mg/L Acute LC50 8.2 mg/L	Daphnia Fish	48 hours 96 hours
Diethanolamine	Acute EC50 12 mg/L Fresh water Acute LC50 28800 µg/L Fresh water	Algae - Pseudokirchneriella subcapitata Crustaceans - Ceriodaphnia dubia – Neonate	96 hours 48 hours
	Acute LC50 2150 μg/L Fresh water Acute LC50 775 mg/L Fresh water	Daphnia - Daphnia pulex Fish - Lepomis macrochirus	48 hours 96 hours

Persistence and degradability

There is no data available.



Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
Diethanolamine	-1.43	-	low

Mobility in soil

Soil/water partition coefficient (Koc): Not available.

Other adverse effects: No known significant effects or critical hazards.

SECTION 13 Disposal Considerations

Disposal methods: The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling empty containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14 Transport Information

Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (ocean, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport.

- U.S. DOT UN/ID Number: Not Regulated Proper shipping name: Hazard class: Packing Group: Exceptions: Environmental Hazards: Transport in Bulk: Special Precautions:
- IMO/IMDG UN/ID Number: Not Regulated Proper shipping name: Hazard class: Packing Group: Exceptions: Environmental Hazards: Transport in Bulk: Special Precautions:
- ICAO/IATA UN/ID Number: Not Regulated Proper shipping name: Hazard Class: Packing Group: Exceptions:



Environmental Hazards: Transport in Bulk: Special Precautions:

- Canada UN/ID Number: Not Regulated (TDG) Proper shipping name: Hazard class: Packing Group: Exceptions: Environmental Hazards: Transport in Bulk: Special Precautions:
- Europe UN/ID Number: Not Regulated (ADR/RID) Proper shipping name: Hazard class: Packing Group: Exceptions: Environmental Hazards: Transport in Bulk: Special Precautions:

DOT-RQ Details : Diethanolamine

Special precautions for user:

Transport within user's premises: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: Not Available

SECTION 15 Regulatory Information

U.S. Federal regulations: TSCA 8(a) PAIR: Siloxanes and Silicones, di-Me TSCA 8(a) CDR Exempt/Partial exemption: Not determined United States inventory (TSCA 8b): Not determined. Clean Water Act (CWA) 311: Ammonia

Clean Air Act Section 112 (b) Hazardous Air Pollutants (HAPs): Not listed

Clean Air Act Section 602 Class I Substances: Not listed

Clean Air Act Section 602 Class II Substances: Not listed

DEA List I Chemicals (Precursor Chemicals): Not listed

SARA 302/304 Composition/information on ingredients No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Delayed (chronic) health hazard



Composition/information on ingredients

Name	%	Fire hazard	Sudden release of pressure	Reactive	Immediate (acute) health hazard	Delayed (chronic) health hazard
Distillates (petroleum), hydrotreated light	10-30	Yes.	No.	No.	No.	No.
Solvent naphtha (petroleum) heavy aliph.	5-10	Yes.	No.	No.	No.	No.
Amides, coco, N,N-bis(hydroxyethyl)	1-5	No.	No.	No.	Yes.	Yes.
Ammonia	0.1-1	No.	No.	No.	Yes.	No.
Diethanolamine	0.1-1	No.	No.	No.	Yes.	Yes.

SARA 313

	Product name	CAS number	%
Form R - Reporting requirements	Aluminum Oxide	1344-28-1	10-30
Supplier notification	Aluminum Oxide	1344-28-1	10-30

SARA 313 notifications must not be detached from the SDS and any copying and redistribution of the SDS shall include copying and redistribution of the notice attached to copies of the SDS subsequently redistributed.

State regulations

Massachusetts	The following components are listed: Aluminium oxidel
New York	The following components are listed: Diethanolamine
New Jersey	The following components are listed: Diethanolamine; Aluminium oxide
Pennsylvania	The following components are listed: Diethanolamine; Aluminium oxide

California Prop. 65

WARNING: This product contains a chemical known to the State of California to cause cancer. **WARNING:** This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	Maximum acceptable dosage level
Amides, coco, N,N-bis(hydroxyethyl) Diethanolamine			No. No.

SECTION 16 Other Information

The supplier disclaims all expressed or implied warranties of merchantability or fitness for a specific use, with respect to the product or the information provided herein, except for conformation to contracted specifications. All information appearing herein is based upon data obtained from manufacturers and/or recognized technical sources. While the information is believed to be accurate, we make no representations as to its accuracy or sufficiency. Conditions of use are beyond our control, and therefore users are responsible for verifying the data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risks of their use, handling, and disposal of the product. Users also assume all risks in regards to the publication or use of, or reliance upon, information contained herein.

This information relates only to the product designated herein, and does not relate to its use in combination with any other material or process.



ABBREVIATIONS:

NG="NOT GIVEN" <="LESS THAN" ND = Not Determined BT="BETWEEN" >="GREATER THAN" NA = Not Applicable

Key to abbreviations : ATE = Acute Toxicity Estimate BCF = Bioconcentration Factor GHS = Globally Harmonized System of Classification and Labelling of Chemicals IATA = International Air Transport Association IBC = Intermediate Bulk Container IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient MARPOL 73/78 = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations