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SECTION 1: Identification

Product Identifier

Product Name Formula 4 Polishing Compound

Product form: Liquid

Color: Grey

Odor: Aliphatic solvent

Recommended Use: Liquid Abrasive product to polish polycarbonate and other substrates.

Supplier's details

MANUFACTURER

Azuradisc, Inc.

ADDRESS:

7307 South 89th
Place

Mesa, AZ 85212

TELEPHONE: 480-827-8786

Toll Free telephone number 1-888-933-4923 Emergency Telephone: Dial 911 in the United States.

SECTION 2: Hazards identification

WARNING!

Causes eye irritation. May cause skin irritation. May cause an allergic skin reaction. Skin Sensitizer: Category 1.

Potential Health Effects

Inhalation: In high concentrations, vapors may be irritating to the respiratory system.

Eye Contact: Causes eye irritation. Exposed individuals may experience eye tearing, redness, and discomfort.

Skin Contact: May cause skin irritation. **Ingestion:** May cause discomfort if swallowed. **Chronic Health Effects:** No data available.

Target Organ(s): | Eye | Skin | Respiratory system | Lung |

Potential Physical / Chemical Effects: This product is not flammable.

OSHA Regulatory Status: This product is hazardous according to OSHA 29CFR 1910.1200.

Environment: The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Precautionary Statements

General:

Keep out of reach of children.

Prevention:

Avoid breathing dust/fume/gas/mist/vapors/spray.

Wear protective gloves.

Contaminated work clothing must not be allowed out of the workplace

Response:

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

Wash contaminated clothing before reuse.

Disposal:

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

2.3. Hazards not otherwise classified

None.

1% of the mixture consists of ingredients of unknown acute oral toxicity.

1% of the mixture consists of ingredients of unknown acute dermal toxicity.

35% of the mixture consists of ingredients of unknown acute inhalation toxicity.

**SECTION 3: Composition/information on ingredients**

Ingredient	CAS-No.	% by Wt
Water	7732-18-5	60 - 90 Trade Secret *
Hydrotreated Light Petroleum Distillates	64742-47-8	10 - 30 Trade Secret *
Aluminum Oxide (non-fibrous)	1344-28-1	5 - 15 Trade Secret *
Dodecamethylcyclohexasiloxane	540-97-6	1 - 5 Trade Secret *
White Mineral Oil (Petroleum)	8042-47-5	1 - 5 Trade Secret *
Ethylene oxide, polymer with ethylenediamine and propylene oxide	Trade Secret*	0.1 - 1.2 Trade Secret *

*The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

† This chemical is hazardous according to OSHA/WHMIS criteria.

SECTION 4: First aid measures

Inhalation: Move into fresh air and keep at rest. If you feel unwell, get medical attention.

Skin Contact: Immediately wash before reuse. If signs/symptoms develop, get medical attention.

Eye Contact: Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If Signs/symptoms persist, get medical attention.

If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

4.2. Most important symptoms and effects, both acute and delayed See Section 11.1. Information on toxicological effects.

4.3. Indication and special treatment required not applicable

SECTION 5: Firefighting measures**5.1. Suitable extinguishing media**

Material will not burn. Use a fire fighting agent suitable for the surrounding fire.

5.2. Special hazards arising from the substance or mixture

None inherent in this product.

Hazardous Decomposition or By-Products**Substance**

Hydrocarbons During Combustion

Carbon monoxide During Combustion

Carbon dioxide During Combustion

Oxides of Nitrogen During Combustion

5.3. Special protective actions for fire-fighters

No special protective actions for fire-fighters are anticipated.

**SECTION 6: Accidental release measures****6.1. Personal precautions, protective equipment and emergency procedures**

Evacuate area. Ventilate the area with fresh air.

6.2. Environmental precautions

Avoid release to the environment.

6.3. Methods and material for containment and cleaning up

Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Seal the container. Dispose of collected material as soon as possible.

SECTION 7: Handling and storage**7.1. Precautions for safe handling**

Avoid eye contact. Avoid breathing of dust created by cutting, sanding, grinding or machining. Keep out of reach of children. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage including any incompatibilities

No special storage requirements.

SECTION 8: Exposure controls/personal protection**8.1. Control parameters****Occupational exposure limits**

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	Additional Comments
Aluminum Oxide (non-fibrous)	1344-28-1	OSHA	TWA(as total dust):15 mg/m ³ ;TWA(respirable fraction):5 mg/m ³	
Aluminum Oxide (non-fibrous)	1344-28-1	CMRG	TWA:1 fiber/cc	
Aluminum, insoluble compounds	1344-28-1	ACGIH	TWA(respirable fraction):1 mg/m ³	A4: Not class. as human carcin
Hydrotreated Light Petroleum Distillates	64742-47-8	CMRG	TWA:165 ppm	
Kerosine (petroleum)	64742-47-8	ACGIH	TWA(as total hydrocarbon vapor, non-aerosol):200 mg/m ³	A3: Confirmed animal carcin., Skin Notation
White Mineral Oil (Petroleum)	8042-47-5	CMRG	TWA:5 mg/m ³ ;STEL:10 mg/m ³	
Paraffin oil	8042-47-5	OSHA	TWA(as mist):5 mg/m ³	
MINERAL OILS, HIGHLY-REFINED OILS	8042-47-5	ACGIH	TWA(inhalable fraction):5 mg/m ³	A4: Not class. as human carcin

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

OSHA : United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling



8.2. Exposure controls

8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Safety Glasses with side shields

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing.

Gloves made from the following material(s) are recommended: Neoprene

Nitrile Rubber

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron – Nitrile

Respiratory protection

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half face piece or full face piece air-purifying respirator suitable for organic vapors and particulates

For questions about suitability for a specific application, consult with your respirator manufacturer.

SECTION 9: Physical and chemical properties

Color: Grey

Odor: Aliphatic solvent

Odor Threshold: No data available.

Physical State: Liquid Emulsion

pH: 7.5 - 9

Melting Point: No data available.

Freezing Point: No data available.

Boiling Point: No data available.

Flash Point: No flash point

Evaporation Rate: No data available.

Flammability (solid, gas) Not applicable

Flammability Limit - Upper (%): No data available.

Flammability Limit - Lower (%): No data available.

Vapor Pressure: No data available.

Vapor Density (Air=1): No data available.

Specific Gravity: 1.0 - 1.02 [Ref Std: WATER=1]

Solubility in Water: No data available.

Solubility (Other): No data available.

Partition Coefficient (n-Octanol/water): No data available.

Auto ignition Temperature: No data available.

Decomposition Temperature: No data available.

Viscosity: 22,000 – 28,000 centipoise

Hazardous Air Pollutants 0.0006 lb HAPS/lb solids [Test Method: Calculated]

Volatile Organic Compounds 164 g/l [Test Method: calculated SCAQMD rule 443.1]

Volatile Organic Compounds 16.0 % weight [Test Method: calculated per CARB title 2]



Percent volatile 81.2 % weight

VOC Less H₂O & Exempt Solvents 489 g/l [Test Method: calculated SCAQMD rule 443.1]

SECTION 10: Stability and reactivity

10.1. Reactivity

This material is considered to be non-reactive under normal use conditions.

10.2. Chemical stability Stable.

10.3. Possibility of hazardous reactions Hazardous polymerization will not occur.

10.4. Conditions to avoid None known.

10.5. Incompatible materials None known.

10.6. Hazardous decomposition products

Substance None known

Condition Refer to section 5.2 for hazardous decomposition products during combustion.

SECTION 11: Toxicological information

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Skin Contact:

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness. Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

Eye Contact:

Dust created by cutting, grinding, sanding, or machining may cause eye irritation. Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

Toxicological Data

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

Acute Toxicity

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE > 5,000 mg/kg
Overall product	Inhalation-Vapor(4 hr)		No data available; calculated ATE > 50 mg/l
Overall product	Ingestion		No data available; calculated ATE > 5,000 mg/kg
Hydrotreated Light Petroleum Distillates	Dermal	Rabbit	LD50 > 3,160 mg/kg
Hydrotreated Light Petroleum Distillates	Inhalation-Dust/Mist	Rat	LC50 > 3.0 mg/l



Safety Data Sheet

Date of update: 09/20/2016

Supersedes: All Previous versions

Formula 4 Polishing Compound

	(4 hours)		
Aluminum Oxide (non-fibrous)	Dermal		LD50 estimated to be > 5,000 mg/kg
Aluminum Oxide (non-fibrous)	Inhalation-Dust/Mist (4 hours)	Rat	LC50 > 2.3 mg/l
Aluminum Oxide (non-fibrous)	Ingestion	Rat	LD50 > 5,000 mg/kg
Dodecamethylcyclohexasiloxane	Dermal	Rat	LD50 > 2,000 mg/kg
Dodecamethylcyclohexasiloxane	Ingestion	Rat	LD50 > 50,000 mg/kg
White Mineral Oil (Petroleum)	Dermal	Rabbit	LD50 > 2,000 mg/kg
White Mineral Oil (Petroleum)	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Hydrotreated Light Petroleum Distillates	Rabbit	Mild irritant
Aluminum Oxide (non-fibrous)	Rabbit	No significant irritation
Dodecamethylcyclohexasiloxane	Rabbit	No significant irritation
White Mineral Oil (Petroleum)	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Hydrotreated Light Petroleum Distillates	Rabbit	Mild irritant
Aluminum Oxide (non-fibrous)	Rabbit	No significant irritation
Dodecamethylcyclohexasiloxane	Rabbit	No significant irritation
White Mineral Oil (Petroleum)	Rabbit	Mild irritant

Skin Sensitization

Name	Species	Value
Hydrotreated Light Petroleum Distillates	Guinea pig	Not sensitizing
White Mineral Oil (Petroleum)	Guinea pig	Not sensitizing

Respiratory Sensitization

Name	Species	Value
No Data Available	No Data Available	No Data Available

Germ Cell Mutagenicity

Name	Route	Value
Hydrotreated Light Petroleum Distillates	In Vitro	Not mutagenic
Aluminum Oxide (non-fibrous)	In Vitro	Not mutagenic
White Mineral Oil (Petroleum)	In Vitro	Not mutagenic

Carcinogenicity

Name	Route	Species	Value
Hydrotreated Light Petroleum Distillates	Dermal	Mouse	Some positive data exist, but the data are not sufficient for classification
Aluminum Oxide (non-fibrous)	Inhalation	Rat	Not carcinogenic
White Mineral Oil (Petroleum)	Dermal	Mouse	Not carcinogenic
White Mineral Oil (Petroleum)	Inhalation	Multiple animal species	Not carcinogenic

Reproductive Toxicity

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Dodecamethylcyclohexasiloxane	Ingestion	Not toxic to female reproduction	Rat	NOAEL 1,000 mg/kg/day	pre mating & during gestation
Dodecamethylcyclohexasiloxane	Ingestion	Not toxic to male reproduction	Rat	NOAEL 1,000 mg/kg/day	28 days
Dodecamethylcyclohexasiloxane	Ingestion	Not toxic to development	Rat	NOAEL 1,000 mg/kg/day	pre mating & during gestation



White Mineral Oil (Petroleum)	Ingestion	Not toxic to female reproduction	Rat	NOAEL 4,350 mg/kg/day	13 weeks
White Mineral Oil (Petroleum)	Ingestion	Not toxic to male reproduction	Rat	NOAEL 4,350 mg/kg/day	13 weeks
White Mineral Oil (Petroleum)	Ingestion	Not toxic to development	Rat	NOAEL 4,350 mg/kg/day	during gestation

Target Organ(s)**Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Hydrotreated Light Petroleum Distillates	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	
Hydrotreated Light Petroleum Distillates	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for		NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Aluminum Oxide (non-fibrous)	Inhalation	pneumoconiosis pulmonary fibrosis	Some positive data exist,	Human	NOAEL Not available	occupational exposure
Dodecamethylcyclohexasil oxane	Ingestion	endocrine system liver respiratory system	Some positive data exist,	Rat	NOAEL 1,000 mg/kg/day	28 days
Dodecamethylcyclohexasil oxane	Ingestion	nervous system	All data are negative	Rat	NOAEL 1,000 mg/kg/day	28 days
White Mineral Oil (Petroleum)	Ingestion	hematopoietic system	Some positive data exist,	Rat	NOAEL 1,381 mg/kg/day	90 days
White Mineral Oil (Petroleum)	Ingestion	liver immune system	Some positive data exist,	Rat	NOAEL 1,336 mg/kg/day	90 days

Aspiration Hazard

Name	Value
Hydrotreated Light Petroleum Distillates	Aspiration hazard
White Mineral Oil (Petroleum)	Aspiration hazard

SECTION 12: Ecological information**Eco toxicological information**

Eco toxicity: Do not discharge this product into public waters or waterways unless authorized by a National Pollution Discharge Elimination System (NPDES) permit issued by the Environmental Protection Agency (EPA).

Mobility: The product is partially dispersible in water.

Persistence and Degradability: No data available.

Bioaccumulation Potential: No data available.

SECTION 13: Disposal considerations

General Information: Dispose of waste and residues in accordance with local authority requirements.

13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.



Options for disposal of this product may depend on the conditions under which it was used. To determine the proper method of disposal, refer to RCRA (40 CFR 261), as well as federal EPA and state and local Regulations.

SECTION 14: Transport information

Non-bulk packaging's (capacity less than or equal to 119 gallons) Not regulated

Transported by air or marine vessel: Bulk or non-bulk packaging's

UN1993, Flammable Liquid,
N.O.S. (Naphtha Solvent), 3, PG
III, ERG #128

SECTION 15: Regulatory information

Canadian Controlled Products Regulations: This product has been classified according to the hazard criteria of the Canadian Controlled Products Regulations, Section 33, and the SDS contains all required information.

WHMIS Classification: D2B

Inventory Status:

This product or all components are listed or exempt from listing on the following inventory: **DSL, TSCA**

US Regulations

CERCLA Hazardous Substance List (40 CFR 302.4): **Not regulated.**

SARA Title III

Section 302 Extremely Hazardous Substances (40 CFR 355, Appendix A): Not regulated.

SARA 313

As of the preparation date, this product did not contain a chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

NFPA 704 Hazard Codes - - - - - Signals Health: 0

Flammability: 1

Reactivity: 0 Special Hazards: -

311/312 Hazard Categories:

Fire Hazard - No Pressure Hazard - No Reactivity Hazard - No Immediate Hazard - Yes Delayed Hazard - No

Section 313 Toxic Release Inventory (40 CFR 372):

Chemical Name	CAS-No.	Reporting threshold for other users	Reporting threshold for manufacturing and processing
Aluminum nitrate	7784-27-2	10000 lbs.	25000 lbs.
Aluminum oxide	1344-28-1	10000 lbs.	25000 lbs.

For reporting purposes: the De Minimis Concentration for a toxic chemical in a mixture is 0.1% for carcinogens as defined in 29 CFR 1910.1200(d)(4) or 1% for others.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):Not regulated.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3): Not regulated.

Drug Enforcement Act: Not regulated.

TSCA

TSCA Section 4(a) Final Test Rules & Testing Consent Orders: Not regulated.

TSCA Section 5(a) (2) Final Significant New Use Rules (SNURs) (40CFR 721, Subpt. E): Not regulated.

TSCA Section 5(e) PMN-Substance Consent Orders: Not regulated.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D): Not regulated.

**State Regulations****California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):** Not regulated.**Massachusetts Right-To-Know List:** Aluminum oxide; Distillates (petroleum), hydro treated light naphthenic**Michigan Critical Materials List (Michigan Natural Resources and Environmental Protection Act (Act. 451 of 1994)):**

Not regulated.

Minnesota Hazardous Substances List: Aluminum oxide; Aluminum nitrate**New Jersey Right-To-Know List:** Aluminum oxide; Aluminum nitrate**Pennsylvania Right-To-Know List:** Aluminum oxide; Aluminum nitrate**Rhode Island Right-To-Know List:** Aluminum oxide**SECTION 16: Other information**

The information and recommendations are offered for the user's consideration and examination, and it is the user's responsibility to satisfy itself that they are suitable and complete for its particular use. If buyer repackages this product, legal counsel should be consulted to insure proper health, safety and other necessary information is included on the container.

NFPA Hazard Classification

	Health Hazard	Fire Hazard	Instability	Special Hazard
NFPA	2	0	0	--

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

NFPA Label colored diamond code: Blue - Health; Red - Flammability; Yellow - Instability; White - Special Hazards

	Health Hazard	FLAMIBILITY	PHYSICAL HAZARD	PERSONAL PROTECTION
HMIS	2	1	0	X

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; - Severe Personal Protection codes: X - Specialized Handling

HMIS Label colored bar code: Blue - Health; Red - Flammability; Orange - Physical Hazards; White - Special

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