

## **SAFETY DATA SHEETS**

**This SDS packet was issued with item:**

072364099

**The safety data sheets (SDS) in this packet apply to one or more components included in the items listed below. Items listed below may require one or more SDS. Please refer to invoice for specific item number(s).**

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## MATERIAL SAFETY DATA SHEET

### SECTION 1 - GENERAL, INFORMATION

Manufacturer: Danville Materials Inc.  
3420 Fostoria Way #A-200  
San Ramon, CA 94583  
Telephone: (925) 973-0710  
Date (revised): December 10, 2010  
Product/Trade Name: SA-85, Alumina Abrasive  
Chemical Name: Alumina

### SECTION 2 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance: White or off-white, crystalline powder  
Freeze-melt point: 3700 F (2038 C)  
Solubility in water: Insoluble; soluble in concentrated acids and alkalis  
Specific gravity: 2.4 - 3.9  
Density: 8-80lb/ft (0.13 - 1.28 g/cm)  
Odor: None, odorless

### SECTION 3 - FIRE AND EXPLOSION DATA

Non-flammable; does not support combustion. Not an explosion hazard.

### SECTION 4 - HEALTH DATA

Aluminum Oxide Exposure Limits: ACGIH TLV 10mg/m<sup>3</sup>,  
OSHA PEL 15, 5mg/m<sup>3</sup>, 64-85% by weight

Alumina is a low health risk by inhalation and should be treated as a nuisance dust as specified by the American Conference of Governmental Industrial Hygienists (ACGIH). Use with adequate ventilation.

#### Potential Health Effects:

Eyes: May cause mechanical irritation. Safety glasses recommended  
Skin: None  
Inhalation: Low health risk by inhalation. Treat as nuisance dust. Use NIOSH-approved dust respirator.

Possible Effects of Overexposure: Individuals with lung disorders should not be exposed to conditions where large airborne quantities of the nuisance dust exist without precautions taken to alleviate the aggravated pre-existing medical condition.

#### First Aid Measures:

Eyes: Flush eyes with plenty of water for at least 15 minutes.  
Irritation persists, consult physician.  
Inhalation: Remove exposed person to fresh air. Restore and/or support breathing as needed. If irritation results, consult a physician.

### SECTION 5 - REACTIVITY DATA

None with water, air, heat, or strong oxidizers.

### SECTION 6 - ENVIRONMENTAL

Waste may be considered as inert material.

### SECTION 7 - HANDLING, STORAGE, TRANSPORTATION

Stable under normal conditions of use, transportation and storage. A void dust during clean-up. Keep material dry.

### SECTION 8 - SPECIAL PRECAUTIONS

Use with adequate ventilation to meet exposure limits. When exposure is excessive, NIOSH approved respiratory protection should be used.

**The data and information given in this Material Safety Data Sheet are accurate on the date of preparation. It does not indicate any warranty or representation.**

## 1. Identification

**Product identifier** Aluminum Oxide

**Other means of identification**  
**Document number** SDS-014-ZD REV B

**Recommended use** Abrasive.

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**

**Supplier**

**Company name** Danville Materials

**Address** 2875 Loker Avenue East  
 Carlsbad, CA 92010

**Telephone** 1-800-827-7940

**Contact** Customer Service

**E-mail** danvillecs@zestdent.com

**Website** www.zestdent.com

**Emergency telephone number** 800-451-8346 / 760-602-8703

## 2. Hazard(s) identification

**Physical hazards** Not classified.

**Health hazards** Not classified.

**OSHA defined hazards** Not classified.

**Label elements**

**Hazard symbol** None.

**Signal word** None.

**Hazard statement** The mixture does not meet the criteria for classification.

**Precautionary statement**

**Prevention** Observe good industrial hygiene practices.

**Response** Wash hands after handling.

**Storage** Store away from incompatible materials.

**Disposal** Dispose of waste and residues in accordance with local authority requirements.

**Hazard(s) not otherwise classified (HNOC)** None known.

**Supplemental information** None.

## 3. Composition/information on ingredients

### Mixtures

Chemical name	CAS number	%
Aluminum oxide	1344-28-1	95 - < 99
Silicon dioxide	7631-86-9	< 5

**Composition comments** All concentrations are in percent by weight.

## 4. First-aid measures

**Inhalation** In case of inhalation of dust: Move to fresh air. Call a physician if symptoms develop or persist.

**Skin contact** Wash off with soap and water. Get medical attention if irritation develops and persists.

**Eye contact** Do not rub eyes. Rinse with water. Get medical attention if irritation develops and persists.

<b>Ingestion</b>	Rinse mouth. Get medical attention if symptoms occur.
<b>Most important symptoms/effects, acute and delayed</b>	Dusts may irritate the respiratory tract, skin and eyes.
<b>Indication of immediate medical attention and special treatment needed</b>	Treat symptomatically.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Use fire-extinguishing media appropriate for surrounding materials.
<b>Unsuitable extinguishing media</b>	No restrictions known.
<b>Specific hazards arising from the chemical</b>	During fire, gases hazardous to health may be formed.
<b>Special protective equipment and precautions for firefighters</b>	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
<b>Fire fighting equipment/instructions</b>	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials.
<b>General fire hazards</b>	Product is nonflammable and does not support combustion.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	Keep unnecessary personnel away. Wear appropriate protective equipment and clothing during clean-up. Use a NIOSH/MSHA approved respirator if there is a risk of exposure to dust/fume at levels exceeding the exposure limits. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Avoid the generation of dusts during clean-up. Collect dust using a vacuum cleaner equipped with HEPA filter. Stop the flow of material, if this is without risk.  Large Spills: Wet down with water and dike for later disposal. Shovel the material into waste container. Following product recovery, flush area with water.  Small Spills: Sweep up or vacuum up spillage and collect in suitable container for disposal.  Never return spills to original containers for re-use. For waste disposal, see section 13 of the SDS. Avoid discharge into drains, water courses or onto the ground.
<b>Environmental precautions</b>	

## 7. Handling and storage

<b>Precautions for safe handling</b>	Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust is formed. Avoid prolonged exposure. Practice good housekeeping.
<b>Conditions for safe storage, including any incompatibilities</b>	Store in tightly closed container. Store in a well-ventilated place. Store in a dry place. Avoid contact with water and moisture. This product is hygroscopic. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Aluminum oxide (CAS 1344-28-1)	PEL	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.

#### US. OSHA Table Z-3 (29 CFR 1910.1000)

Components	Type	Value	Form
Aluminum oxide (CAS 1344-28-1)	TWA	5 mg/m3	Respirable fraction.
		15 mg/m3	Total dust.
		50 mppcf	Total dust.
		15 mppcf	Respirable fraction.

**US. OSHA Table Z-3 (29 CFR 1910.1000)**

Components	Type	Value	Form
Silicon dioxide (CAS 7631-86-9)	TWA	0.8 mg/m3	
		20 mppcf	

**US. ACGIH Threshold Limit Values**

Components	Type	Value	Form
Aluminum oxide (CAS 1344-28-1)	TWA	1 mg/m3	Respirable fraction.

**US. NIOSH: Pocket Guide to Chemical Hazards**

Components	Type	Value
Silicon dioxide (CAS 7631-86-9)	TWA	6 mg/m3

**Biological limit values**

No biological exposure limits noted for the ingredient(s).

**Appropriate engineering controls**

Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If engineering measures are not sufficient to maintain concentrations of dust particulates below the Occupational Exposure Limit (OEL), suitable respiratory protection must be worn. If material is ground, cut, or used in any operation which may generate dusts, use appropriate local exhaust ventilation to keep exposures below the recommended exposure limits.

**Individual protection measures, such as personal protective equipment****Eye/face protection**

Wear safety glasses with side shields (or goggles).

**Skin protection****Hand protection**

Wear protective gloves. Suitable gloves can be recommended by the glove supplier.

**Skin protection****Other**

Normal work clothing (long sleeved shirts and long pants) is recommended.

**Respiratory protection**

If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn. Wear NIOSH approved respirator appropriate for airborne exposure at the point of use.

**Thermal hazards**

Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**9. Physical and chemical properties****Appearance****Physical state**

Solid.

**Form**

Solid.

**Color**

White, Brown.

**Odor**

Not available.

**Odor threshold**

Not available.

**pH**

Not applicable.

**Melting point/freezing point**

Not available.

**Initial boiling point and boiling range**

Not applicable.

**Flash point**

Not applicable.

**Evaporation rate**

Not applicable.

**Flammability (solid, gas)**

Product is nonflammable and does not support combustion.

**Upper/lower flammability or explosive limits****Explosive limit - lower (%)**

Not applicable.

<b>Explosive limit - upper (%)</b>	Not applicable.
<b>Vapor pressure</b>	Not applicable.
<b>Vapor density</b>	Not applicable.
<b>Relative density</b>	Not available.
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Not available.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	Not applicable.
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not applicable.
<b>Other information</b>	
<b>Explosive properties</b>	Not explosive.
<b>Oxidizing properties</b>	Not oxidizing.
<b>Percent volatile</b>	Not applicable.

## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Contact with incompatible materials. Avoid contact with water and moisture. The product is hygroscopic and will absorb water by contact with the moisture in the air. Avoid dust formation.
<b>Incompatible materials</b>	Acids. Chlorine. Fluorine.
<b>Hazardous decomposition products</b>	Decomposition is not expected under normal conditions of use and storage.

## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Dust may irritate respiratory system. Prolonged inhalation may be harmful.
<b>Skin contact</b>	Dust or powder may irritate the skin.
<b>Eye contact</b>	Dust may irritate the eyes.
<b>Ingestion</b>	May cause discomfort if swallowed.

**Symptoms related to the physical, chemical and toxicological characteristics**      Dusts may irritate the respiratory tract, skin and eyes.

### Information on toxicological effects

**Acute toxicity**      Not expected to be acutely toxic.

<b>Components</b>	<b>Species</b>	<b>Test Results</b>
Silicon dioxide (CAS 7631-86-9)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 5000 mg/kg, 24 Hours
<b>Inhalation</b>		
<i>Dust</i>		
LC50	Rat	> 0.14 mg/l, 4 Hours
<b>Oral</b>		
LD50	Rat	> 3300 mg/kg
<b>Skin corrosion/irritation</b>	May cause irritation through mechanical abrasion.	
<b>Serious eye damage/eye irritation</b>	Dust or powder may cause mechanical eye irritation.	
<b>Respiratory or skin sensitization</b>		
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.	

<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.
<b>Carcinogenicity</b>	Not classifiable as to carcinogenicity to humans.
<b>IARC Monographs. Overall Evaluation of Carcinogenicity</b>	
Silicon dioxide (CAS 7631-86-9)	3 Not classifiable as to carcinogenicity to humans.
<b>NTP Report on Carcinogens</b>	
Not listed.	
<b>OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)</b>	
Not regulated.	
<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.
<b>Specific target organ toxicity - single exposure</b>	Not classified.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	Not an aspiration hazard.
<b>Chronic effects</b>	Prolonged inhalation may be harmful.

## 12. Ecological information

<b>Ecotoxicity</b>	The product is not classified as environmentally hazardous.
<b>Persistence and degradability</b>	The product solely consists of inorganic compounds which are not biodegradable.
<b>Bioaccumulative potential</b>	No data available on bioaccumulation.
<b>Mobility in soil</b>	No data available for this product.
<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## 13. Disposal considerations

<b>Disposal instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

## 14. Transport information

<b>DOT</b>	Not regulated as dangerous goods.
<b>IATA</b>	Not regulated as dangerous goods.
<b>IMDG</b>	Not regulated as dangerous goods.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not applicable.

## 15. Regulatory information

<b>US federal regulations</b>	This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.
<b>TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)</b>	
Not regulated.	
<b>CERCLA Hazardous Substance List (40 CFR 302.4)</b>	
Not listed.	

**SARA 304 Emergency release notification**

Not regulated.

**OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)**

Not regulated.

**Toxic Substances Control Act (TSCA)** All components of the mixture on the TSCA 8(b) inventory are designated "active".**Superfund Amendments and Reauthorization Act of 1986 (SARA)****SARA 302 Extremely hazardous substance**

Not listed.

**SARA 311/312 Hazardous chemical** No**SARA 313 (TRI reporting)**

Chemical name	CAS number	% by wt.
Aluminum oxide	1344-28-1	95 - < 99

**Other federal regulations****Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List**

Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)**

Not regulated.

**Safe Drinking Water Act (SDWA)** Not regulated.**US state regulations****US. Massachusetts RTK - Substance List**

Aluminum oxide (CAS 1344-28-1)

Silicon dioxide (CAS 7631-86-9)

**US. New Jersey Worker and Community Right-to-Know Act**

Aluminum oxide (CAS 1344-28-1)

Silicon dioxide (CAS 7631-86-9)

**US. Pennsylvania Worker and Community Right-to-Know Law**

Aluminum oxide (CAS 1344-28-1)

Silicon dioxide (CAS 7631-86-9)

**US. Rhode Island RTK**

Aluminum oxide (CAS 1344-28-1)

**California Proposition 65**California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to [www.P65Warnings.ca.gov](http://www.P65Warnings.ca.gov).**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	Yes
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates this product complies with the inventory requirements administered by the governing country(s).

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).



## 16. Other information, including date of preparation or last revision

Issue date 05-March-2019

Revision date -

Version # 01

NFPA ratings



### Disclaimer

Danville Materials cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use. The information in the sheet was written based on the best knowledge and experience currently available.

# Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

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## Alumina Abrasive SA-85

### SECTION 1: Identification of the substance/mixture and of the supplier

**Product name:** Alumina Abrasive SA-85

**Manufacturer/Supplier Trade name:** Abrasive Alumina

**Manufacturer/Supplier Article number:** 0356

**Recommended uses of the product and restrictions on use:** Bathroom Tub Wash Cleaner.

**Manufacturer Details:**

Danville Materials  
3420 Fostoria Way Suite a200  
San Ramon, CA 94583  
Tel:

**Supplier Details:**

Danville Materials  
3420 Fostoria Way Suite a200  
San Ramon, CA 94583  
Tel:

**Emergency telephone number:**

CHEMTREC: 1-800-424-9300, 703-527-3887

### SECTION 2: Hazards identification

**Classification of the substance or mixture:**



**Irritant**

Acute toxicity (oral, dermal, inhalation), category 4  
Specific target organ toxicity following single exposure, category 3

Acute inhalation category 4  
Specific target organ toxicity following single exposure, category 3

**Signal word:** Warning.

**Hazard statements:**

Harmful if inhaled.  
May cause respiratory irritation.

**Precautionary statements:**

Avoid breathing dust/fume/gas/mist/vapors/spray.  
Use only outdoors or in a well-ventilated area.  
IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  
Call a POISON CENTER or doctor/physician if you feel unwell.  
Store in a well ventilated place. Keep container tightly closed.  
Store locked up.  
Dispose of contents/container as directed in Section 13.

**Hazards not otherwise classified (HNOC):**

May form combustible dust concentrations in the air

**Other Non-GHS Classification:**

WHMIS



D2B

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## Alumina Abrasive SA-85

### NFPA/HMIS



NFPA SCALE (0-4)

Health	2
Flammability	0
Physical Hazard	0
Personal Protection	X

HMIS RATINGS (0-4)

0=Minimal Hazard; 1=Slight Hazard; 2=Moderate Hazard; 3=Serious Hazard; 4=Severe Hazard.

### SECTION 3: Composition/information on ingredients

Ingredients:		
CAS#	Description	Wt. %
CAS 1344-28-1	Alpha Alumina	64-85 %

Percentages are by weight

### SECTION 4: First aid measures

#### Description of first aid measures

**After inhalation:** Move exposed to fresh air. Give artificial respiration if necessary. If breathing is difficult give oxygen. Loosen clothing and place exposed in a comfortable position. Seek medical assistance if cough or other symptoms appear.

**After skin contact:** Wash hands and exposed skin with soap and plenty of water. Seek medical attention if irritation persists or if concerned.

**After eye contact:** Protect unexposed eye. Flush exposed eye gently using water for 15-20 minutes. Remove contact lenses while rinsing. Keep eyelids open while rinsing. Seek medical attention if irritation persists or if concerned.

**After swallowing:** Rinse mouth with water. Do not induce vomiting. Never give anything by mouth to an unconscious person. Immediately seek medical attention.

#### Most important symptoms and effects, both acute and delayed:

Shortness of breath. Headache. Nausea. Dizziness.

#### Indication of any immediate medical attention and special treatment needed:

If seeking medical attention provide SDS document to physician. Physician should treat symptomatically.

### SECTION 5: Firefighting measures

#### Extinguishing media

##### Suitable extinguishing agents:

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

**For safety reasons unsuitable extinguishing agents:** None identified.

#### Special hazards arising from the substance or mixture:

Thermal decomposition can lead to release of irritating gases and vapors.

#### Advice for firefighters:

##### Protective equipment:

Wear protective eyewear, gloves, and clothing. Refer to Section 8.

##### Additional information (precautions):

Avoid inhaling gases, fumes, dust, mist, vapor, and aerosols. Avoid contact with skin, eyes, and clothing.

### SECTION 6: Accidental release measures

#### Personal precautions, protective equipment and emergency procedures:

Ensure adequate ventilation. Ensure that air-handling systems are operational.

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## Alumina Abrasive SA-85

### Environmental precautions:

Should not be released into environment. Prevent from reaching drains, sewer, or waterway.

### Methods and material for containment and cleaning up:

Containerize for disposal. Refer to Section 13. Keep in suitable closed containers for disposal. Always obey local regulations. If necessary use trained response staff or contractor. Wear protective eyewear, gloves, and clothing. Refer to Section 8.

**Reference to other sections:** No additional information.

## SECTION 7: Handling and storage

### Precautions for safe handling:

Avoid contact with skin, eyes, and clothing. Follow good hygiene procedures when handling chemical materials. Refer to Section 8. Follow proper disposal methods. Refer to Section 13. Do not eat, drink, smoke, or use personal products when handling chemical substances.

### Conditions for safe storage, including any incompatibilities:

Keep away from food and beverages. Protect from freezing and physical damage. Keep container tightly sealed. Store away from incompatible materials.

## SECTION 8: Exposure controls/personal protection



### Control Parameters:

1344-28-1, Aluminum oxide, ACGIH TLV: 1 mg/m<sup>3</sup>, OSHA PEL: 5mg/m<sup>3</sup>.

### Appropriate Engineering controls:

Emergency eye wash fountains and safety showers should be available in the immediate vicinity of use or handling. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapor and mists below the applicable workplace exposure limits (Occupational Exposure Limits-OELs) indicated above. Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses or goggles are appropriate eye protection.

### Respiratory protection:

Not required under normal conditions of use. Where risk assessment shows air-purifying respirators are appropriate use a full-face particle respirator type N100 (US) or type P3 (EN 143) respirator cartridges as a backup to engineering controls. When necessary use NIOSH approved breathing equipment.

### Protection of skin:

Select glove material impermeable and resistant to the substance. Select glove material based on rates of diffusion and degradation. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Use proper glove removal technique without touching outer surface. Avoid skin contact with used gloves. Wear protective clothing.

### Eye protection:

Wear equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses or goggles are appropriate eye protection.

### General hygienic measures:

Perform routine housekeeping. Wash hands before breaks and at the end of work. Avoid contact with skin, eyes, and clothing. Before wearing wash contaminated clothing.

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## Alumina Abrasive SA-85

### SECTION 9: Physical and chemical properties

<b>Appearance (physical state, color):</b>	White or off-white, crystalline powder	<b>Explosion limit lower:</b>	Not applicable
		<b>Explosion limit upper:</b>	Not applicable
<b>Odor:</b>	None, odorless	<b>Vapor pressure:</b>	Not applicable
<b>Odor threshold:</b>	Not Determined	<b>Vapor density:</b>	Not applicable
<b>pH-value:</b>	Not Determined	<b>Relative density:</b>	Not Determined
<b>Melting/Freezing point:</b>	3700°F (2038°C)	<b>Solubilities:</b>	Insoluble in water, soluble in concentrated acids and alkalizes.
<b>Boiling point/Boiling range:</b>	Not Determined	<b>Partition coefficient (n-octanol/water):</b>	Not Determined
<b>Flash point (closed cup):</b>	> 104°C	<b>Auto/Self-ignition temperature:</b>	Not Determined
<b>Evaporation rate:</b>	Not Determined	<b>Decomposition temperature:</b>	Not Determined
<b>Flammability (solid, gaseous):</b>	Non flammable	<b>Viscosity:</b>	a. Kinematic: Not Determined b. Dynamic: Not Determined
<b>Density:</b> 8-80 lb./ft. (0.13 - 1.28 g/cm)			

### SECTION 10: Stability and reactivity

**Reactivity:** Nonreactive under normal conditions.

**Chemical stability:** Stable under normal conditions.

**Possible hazardous reactions:** None under normal processing.

**Conditions to avoid:** Incompatible materials.

**Incompatible materials:** Strong acids.

**Hazardous decomposition products:** Not determined.

### SECTION 11: Toxicological information

#### Acute Toxicity:

<b>Oral:</b>	>10,000 mg/kg	LD50 Rat
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<b>Inhalation:</b>	4 h - > 2.6 mg/l	LD50 Rat
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**Chronic Toxicity:** No additional information.

#### Corrosion irritation:

<b>Dermal:</b>	No skin irritation	Rabbit
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<b>Ocular:</b>	No eye irritation	Rabbit
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**Sensitization:** Guinea pig: Did not cause sensitization on laboratory animals.

**Single target organ (STOT):** No additional information.

**Numerical measures:** No additional information.

**Carcinogenicity:** No additional information.

**Mutagenicity:** No additional information.

**Reproductive toxicity:** No additional information.

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## Alumina Abrasive SA-85

### SECTION 12: Ecological information

**Ecotoxicity:** No toxicity at the limit of solubility.  
**Persistence and degradability:** No information available.  
**Bioaccumulative potential:** No information available.  
**Mobility in soil:** No information available.  
**Other adverse effects:** No information available.

### SECTION 13: Disposal considerations

#### Waste disposal recommendations:

It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities (US 40CFR262.11). Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Chemical waste generators must also consult local, regional, and national hazardous waste regulations. Ensure complete and accurate classification. Dispose of empty containers as unused product.

### SECTION 14: Transport information

<b>UN-Number:</b>	Not Regulated.
<b>UN proper shipping name:</b>	Not Regulated.
<b>Transport hazard class(es):</b>	Not applicable.
<b>Packing group:</b>	Not applicable.
<b>Environmental hazard:</b>	Not applicable.
<b>Transport in bulk:</b>	Not applicable.
<b>Special precautions for user:</b>	Not applicable.

### SECTION 15: Regulatory information

#### United States (USA)

**SARA Section 311/312 (Specific toxic chemical listings):** Acute.  
**SARA Section 313 (Specific toxic chemical listings):** None of the ingredients are listed.  
**RCRA (hazardous waste code):** None of the ingredients are listed.  
**TSCA (Toxic Substances Control Act):** All ingredient are listed.  
**CERCLA (Comprehensive Environmental Response, Compensation, and Liability Act):** None of the ingredients are listed.

#### Proposition 65 (California):

**Chemicals known to cause cancer:** None of the ingredients are listed.  
**Chemicals known to cause reproductive toxicity for females:** None of the ingredients are listed.  
**Chemicals known to cause reproductive toxicity for males:** None of the ingredients are listed.  
**Chemicals known to cause developmental toxicity:** None of the ingredients are listed.

#### Canada

**Canadian Domestic Substances List (DSL):** All ingredients are listed.  
**Canadian NPRI Ingredient Disclosure list (limit 0.1%):** None of the ingredients are listed.  
**Canadian NPRI Ingredient Disclosure list (limit 1%):** None of the ingredients are listed.

### SECTION 16: Other information

This product has been classified in accordance with hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.

**Note:** The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and develop work practice procedures for a safe work environment. The information contained herein is, to the best of our knowledge and belief, accurate.

# Safety Data Sheet

according to 29CFR1910/1200 and GHS Rev. 3

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However, since the conditions of handling and use are beyond our control, we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all applicable laws and regulations applicable to this material.

### Abbreviations and acronyms:

**IMDG:** International Maritime Code for Dangerous Goods.  
**PNEC:** Predicted No-Effect Concentration (REACH).  
**CFR:** Code of Federal Regulations (USA).  
**SARA:** Superfund Amendments and Reauthorization Act (USA).  
**RCRA:** Resource Conservation and Recovery Act (USA).  
**TSCA:** Toxic Substances Control Act (USA).  
**NPRI:** National Pollutant Release Inventory (Canada).  
**DOT:** US Department of Transportation.  
**IATA:** International Air Transport Association.  
**GHS:** Globally Harmonized System of Classification and Labelling of Chemicals.  
**ACGIH:** American Conference of Governmental Industrial Hygienists.  
**CAS:** Chemical Abstracts Service (division of the American Chemical Society).  
**NFPA:** National Fire Protection Association (USA).  
**HMIS:** Hazardous Materials Identification System (USA).  
**WHMIS:** Workplace Hazardous Materials Information System (Canada).  
**DNEL:** Derived No-Effect Level (REACH).

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