

**DISPAL 23N4-80 ALUMINA**

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**SECTION 1 IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING**

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<b>Trade name</b>	DISPAL 23N4-80 ALUMINA		
<b>Synonyms</b>	Water Dispersible (Pseudo) Boehmite Alumina, $Al_2O_3 \cdot (x)H_2O$ , Aluminum Oxide Hydroxide, Alpha Alumina Monohydrate, Gamma- $AlOOH$ [Crystallagraphic Designation]		
<b>Use</b>	Catalyst production, Industrial use, Inorganic Coating		
<b>Company</b>	Sasol Chemicals (USA) LLC (an affiliate of Sasol Chemicals North America LLC)		
<b>Address</b>	12120 Wickchester Lane, Houston, TX 77079		
<b>Telephone</b>	CHEMTREC North America Transportation Emergency (24-hr)		(800) 424 9300
	CHEMTREC World Wide		(703) 527-3887
	Other Emergencies (24-hr)		(337) 494 5142
	SDS and Product Information (8:00am-4:30pm CST)		(281) 588 3491
	Health and Safety Information (7:30am-4:00pm CST)		(281) 588 3492
<b>E-mail address</b>	SasolElectronicSDS@us.sasol.com		

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**SECTION 2 HAZARDS IDENTIFICATION**

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Not a hazardous substance or mixture according to OSHA HCS 2012.

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**SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS**

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<b><u>Components</u></b>	<b><u>CAS-No.</u></b>	<b><u>Weight percent</u></b>
Boehmite	1318-23-6	93 - 97
Water	7732-18-5	2.5 - 5
Nitric Acid	7697-37-2	<2

See Section 8 for Exposure Guidelines and Section 15 for Regulatory Classifications.

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**SECTION 4 FIRST AID MEASURES**

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<b>Eye contact</b>	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
<b>Skin contact</b>	Wash off with plenty of water. Take off all contaminated clothing immediately. If skin irritation persists, call a physician. Wash contaminated clothing before re-use.
<b>Inhalation</b>	Remove to fresh air. If breathing is irregular or stopped, administer artificial respiration. In case of shortness of breath, give oxygen. Call a physician immediately.
<b>Ingestion</b>	If swallowed, call a poison control centre or doctor immediately. Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person.

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**SECTION 5            FIREFIGHTING MEASURES**

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**FLAMMABLE PROPERTIES**

**Fire/explosion**    This is an inert material and will not produce a dust explosion.

**Suitable  
extinguishing media**    The product is not flammable.

**Protective equipment  
and precautions for  
firefighters**    In the event of fire, wear self-contained breathing apparatus.

**Further information**    Keep containers and surroundings cool with water spray.

**SECTION 6            ACCIDENTAL RELEASE MEASURES**

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**Methods and  
materials for  
containment and  
cleaning up**    Clean up promptly by scoop or vacuum. Dispose of only in accordance with local, state, and federal regulations.

**SECTION 7            HANDLING AND STORAGE**

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**Safe handling advice**    Normal measures for preventive fire protection. Ensure all equipment is electrically grounded before beginning transfer operations.

**Storage/Transport  
pressure**    Ambient

**Load/Unload  
temperature**    Ambient

**Further information  
on storage conditions**    Avoid moisture. Alumina powder will adsorb atmospheric moisture. Do not store wet product in aluminum containers due to corrosion and hydrogen generation.

**SECTION 8            EXPOSURE CONTROLS/PERSONAL PROTECTION**

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**ENGINEERING MEASURES**

Air contaminant levels should be controlled below the PEL or TLV for this product (see Exposure Guidelines).

**PERSONAL PROTECTIVE EQUIPMENT**

**Eyes**    Safety glasses with side-shields

**Skin**    Wear suitable protective clothing, gloves and eye/face protection.

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**Inhalation** Respirator must be worn if exposed to dust. Use NIOSH approved respiratory protection.

**EXPOSURE GUIDELINES**

<u>Components</u>	<u>Exposure limit(s)</u>
<b>Boehmite</b>	OSHA PEL (Permissible Exposure Limit) 15 mg/m3 Total dust OSHA PEL (Permissible Exposure Limit) 5 mg/m3 Respirable dust ACGIH TLV (8-hour) 10 mg/m3 Total dust ACGIH TLV (8-hour) 1 mg/m3 Respirable dust The ACGIH TLV is for Aluminum metal and insoluble compounds.
<b>Nitric Acid</b>	OSHA PEL (Permissible Exposure Limit) 2 ppm 5 mg/m3 ACGIH TLV (8-hour) 2 ppm ACGIH STEL (Short Term Exposure Limit) 4 ppm

PEL= Permissible Exposure Limits  
TLV= Threshold Limit Value  
EL= Excursion Limit

TWA= Time Weighted Average (8 hr.)  
STEL= Short Term Exposure Limit (15 min.)  
WEEL= Workplace Environmental Exposure Level

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**SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**

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**Appearance** solid

**Colour** white

**Form** powder

**Odour** odourless

**Odour Threshold** No data available

**Flash point** Not applicable

**Flammability** Upper explosion limit: Not applicable  
Lower explosion limit: Not applicable

**Boiling point/boiling range** Not applicable

**Melting point/range** Not applicable

**Auto-ignition temperature** Not applicable

**Decomposition temperature** No data available

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<b>Flammability (solid, gas)</b>	No data available
<b>Vapour pressure</b>	Not applicable
<b>Vapour density</b>	None.
<b>Density</b>	2.8 - 3.0 g/cm <sup>3</sup>
<b>Relative density</b>	No data available
<b>Water solubility</b>	dispersible
<b>Viscosity</b>	Not applicable
<b>pH</b>	No data available
<b>Evaporation rate</b>	No data available
<b>Partition coefficient: n-octanol/water</b>	No data available

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**SECTION 10 STABILITY AND REACTIVITY**

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<b>Reactivity</b>	Stable at normal ambient temperature and pressure.
<b>Chemical stability</b>	No decomposition if stored and applied as directed.
<b>Conditions to avoid</b>	None.
<b>Hazardous decomposition products</b>	In case of incomplete combustion an increased formation of oxides of nitrogen (NO <sub>x</sub> ) is to be expected.
<b>Materials to avoid</b>	None..
<b>Hazardous polymerisation</b>	None.

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**SECTION 11 TOXICOLOGICAL INFORMATION**

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<b>Additional Remarks</b>	Information given is based on data obtained from similar substances.
<b>Acute dermal toxicity</b>	LD50 Rabbit: > 2,000 mg/kg
<b>Acute inhalation toxicity</b>	Rat (4 hours) Inhalation of fine particles (6 - 8 microns in diameter) of alumina by rats for 4 hours resulted in no signs of toxicity.

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<b>Acute oral toxicity</b>	LD50 Rat: > 5,000 mg/kg
<b>Skin corrosion/irritation</b>	Primary irritation (Rabbit): 0.0 (Max. score is 8.0.) Human experience: Prolonged skin contact may cause skin irritation.
<b>Serious eye damage/eye irritation</b>	Primary irritation (Rabbit): 7 (Max. score is 110.) minimally irritating
<b>Respiratory or skin sensitisation</b>	No data available
<b>Germ cell mutagenicity</b>	<b>Genotoxicity in vitro:</b> No data available  <b>Genotoxicity in vivo:</b> No data available  <b>Assessment Mutagenicity:</b> No data available
<b>Reproductive toxicity</b>	<b>Reproductive toxicity:</b> No data available  <b>Assessment Reproductive toxicity:</b> No data available  <b>Teratogenicity:</b> No data available  <b>Assessment teratogenicity:</b> No data available
<b>STOT - single exposure</b>	No data available
<b>STOT - repeated exposure</b>	No data available
<b>Aspiration toxicity</b>	No data available
<b>Carcinogenicity</b>	<b>Assessment carcinogenicity:</b> Contains no ingredient listed as a carcinogen

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**SECTION 12 ECOLOGICAL INFORMATION**

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**Aquatic toxicity** Product is an inorganic solid that is not bioavailable to aquatic biota and non-toxic.

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<b>Toxicity to fish</b>	No data available
<b>Toxicity to aquatic invertebrates</b>	No data available
<b>Toxicity to algae</b>	No data available
<b>Chronic toxicity to fish</b>	No data available
<b>Chronic toxicity to aquatic invertebrates</b>	No data available
<b>Biodegradation</b>	The methods for determining biodegradability are not applicable to inorganic substances.
<b>Bioaccumulative potential</b>	No data available
<b>Mobility in soil</b>	No data available
<b>Other adverse effects</b>	No data available

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**SECTION 13                      DISPOSAL CONSIDERATIONS**

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<b>Waste Code</b>	Any unused product or empty containers may be disposed of as non-hazardous in accordance with state and federal requirements. Re-evaluation of the product may be required by the user at the time of disposal, since the product uses, transformations, mixtures, contamination, and spillage may change the classification. If the resulting material is determined to be hazardous, please dispose in accordance with state and federal (40 CFR 262) hazardous waste regulations.
<b>Disposal methods</b>	Dispose of only in accordance with local, state, and federal regulations.
<b>Empty containers.</b>	Empty containers and original plastic liners may contain product residue. Handling of empty containers and liners should be in a manner to minimize dust generation. Safe handling procedures as outlined in the SDS should be followed at all times. Consult the appropriate official for information regarding disposal requirements.

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**SECTION 14                      TRANSPORT INFORMATION**

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<b>DOT</b>	not regulated
<b>IATA</b>	not regulated
<b>IMDG</b>	not regulated

**DISPAL 23N4-80 ALUMINA**

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Remarks No data available

**SECTION 15 REGULATORY INFORMATION****U.S. FEDERAL REGULATIONS****TSCA Inventory Listing****Components****CAS-No.**

Boehmite

1318-23-6

Water

7732-18-5

Nitric Acid

7697-37-2

Boehmite modified with nitric acid where the nitric acid is adsorbed onto the Boehmite is not free. This product is treated as a mixture of Boehmite CAS 1318-23-6 and Nitric Acid CAS 7697-37-2

All chemical substances in this product are either on the TSCA Active Inventory, or in compliance with the inventory.

**SARA 302 Status****Components****CAS-No.****Weight percent**

No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

**SARA 311/312 Classification**

Should this product meet EPCRA 311/312 Tier reporting criteria of 40 CFR 370, refer to Section 2 of this SDS for appropriate classification and Section 3 for components that meet the hazardous classification.

**SARA 313 Chemical****Components****CAS-No.****Weight percent**

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

**US. EPA CERCLA Hazardous Substances (40 CFR 302)****Components****Reportable Quantity****Weight percent**

none

**INTERNATIONAL REGULATIONS****WHMIS Classification**

Not a hazardous substance or mixture according to the Globally Harmonised System (GHS).

**European Union**

The product does not need to be labelled in accordance with EC directives or respective national laws.

**Australia. Inventory of Chemical Substances (AICS)**

Listed

**Japan. Inventory of Existing and New Chemical Substances (ENCS)**

Listed



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Japan. ISHL - Inventory of Chemical Substances	Listed
Canada. Domestic Substances List (DSL) Inventory	Not listed
Canada. Non-Domestic Substance Listing (NDSL)	Not listed
Philippines. Inventory of Chemicals / Chemical Substances (PICCS)	Listed
Korea. Existing Chemicals Inventory (KECI)	Listed
China. Inventory of Existing Chemical Substances (IECSC)	Listed
Mexico. National Inventory of Chemical Substances (INSQ)	Not listed
New Zealand. Inventory of Chemical Substances (NZIoC)	Listed
Switzerland. Inventory of Notified New Substances (CHINV)	Listed
Taiwan. National Existing Chemical Inventory (NECI)	Listed

Please note: The names and CAS numbers which are used for this product in the stated inventories may deviate from the information which is listed in Section 3.

**STATE REGULATIONS**

California Prop. 65

Components

none

CAS-No.**SECTION 16 OTHER INFORMATION****HAZARD RATINGS**

	<u>Health</u>	<u>Flammability</u>	<u>Physical Hazard/ Instability</u>
<b>HMIS®</b>	1	0	0
<b>NFPA</b>	1	0	0

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