

**NAFOL 20+BA Alcohol**

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

Trade name	NAFOL 20+BA Alcohol	
Synonyms	Arachidyl Alcohol	
Use	Paper Chemical	
Company	Sasol Chemicals (USA) LLC (an affiliate of Sasol Chemicals North America LLC)	
Address	12120 Wickchester Lane, Houston, TX 77079	
Telephone	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
E-mail address	SasolElectronicSDS@us.sasol.com	

SECTION 2 HAZARDS IDENTIFICATION

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

SECTION 3 COMPOSITION/INFORMATION ON INGREDIENTS

<u>Components</u>	<u>CAS-No.</u>	<u>Weight percent</u>
Alcohols, C16-18, distn. residues	68603-17-8	40 - 50
1-Octadecanol	112-92-5	13 - 20
1-Eicosanol	629-96-9	0 - 6
1-Docosanol	661-19-8	13 - 20
Alcohols, C18-22, distn. residues	1160164-88-4	4 - 18
Alcohols, C12-22, distn. residues	1476777-83-9	<18

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

SECTION 4 FIRST AID MEASURES

Eye contact	Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
Skin contact	Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. When symptoms persist or in all cases of doubt seek medical advice. Wash contaminated clothing before re-use.
Inhalation	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.



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Ingestion 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.

SECTION 5 FIREFIGHTING MEASURES

FLAMMABLE PROPERTIES

Fire/explosion Avoid dust formation. Dust may form explosive mixture in air.

Suitable extinguishing media Water spray. Alcohol-resistant foam. Dry chemical. Carbon dioxide (CO₂).

Protective equipment and precautions for firefighters Wear self-contained breathing apparatus and protective suit. Keep containers and surroundings cool with water spray.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Methods and materials for containment and cleaning up Evacuate personnel to safe areas. Remove all sources of ignition. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13). Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Non-sparking tools should be used. Do not flush into surface water or sanitary sewer system.

Spill precautions Material can create slippery conditions.

SECTION 7 HANDLING AND STORAGE

Safe handling advice Ensure all equipment is electrically grounded before beginning transfer operations. Minimize dust generation and accumulation. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Dry powders can build static electricity charges when subjected to the friction of transfer and mixing operations.

Storage/Transport pressure Ambient

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING MEASURES

Ensure adequate ventilation, especially in confined areas. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen deficient environment. Ensure that dust-handling

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systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks.

PERSONAL PROTECTIVE EQUIPMENT

Eyes Wear as appropriate:
Goggles. Face-shield.

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

Inhalation No personal respiratory protective equipment normally required. Use respirator when performing operations involving potential exposure to vapour of the product. Use NIOSH approved respiratory protection.

EXPOSURE GUIDELINES

Contains no substances with occupational exposure limit values.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance solid

Colour light yellow

Form Pastilles

Odour sweet

Odour Threshold No data available

Flash point 208 °C, 406 °F; DIN 51758;

Flammability Upper explosion limit: No data available
Lower explosion limit: No data available

Boiling point/boiling range approximately > 350 °C, > 662 °F;

Melting point/range 53 - 58 °C, 127 - 136 °F;

Auto-ignition temperature > 225 °C, > 437 °F;

Decomposition temperature No data available

Flammability (solid, gas) No data available

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Vapour pressure < 0.75 mm Hg @ 20 °C, 68 °F;

Vapour density 9.3 - 13.2

Density 0.804 g/cm³ @ 80 °C, 176 °F; DIN 51757;

Relative density No data available

Water solubility @ 20 °C, 68 °F; insoluble

Viscosity No data available

Viscosity, dynamic 6.7 mPa.s @ 80 °C, 176 °F;

pH No data available

Evaporation rate No data available

Partition coefficient: n-octanol/water No data available

SECTION 10 STABILITY AND REACTIVITY

Reactivity Stable at normal ambient temperature and pressure.

Chemical stability No decomposition if stored and applied as directed.

Conditions to avoid Keep away from heat and sources of ignition.

Hazardous decomposition products Combustion products include carbon dioxide, carbon monoxide and possibly other unidentified organic compounds.

Materials to avoid Can react with strong oxidizers, inorganic acids, and halogens.

Hazardous polymerisation None.

SECTION 11 TOXICOLOGICAL INFORMATION

Additional Remarks Information given is based on data obtained from similar substances.

Acute dermal toxicity LD50 Rabbit: > 5,000 mg/kg
(literature value)

Acute inhalation toxicity Negligible or unlikely exposure pathways

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Acute oral toxicity	LD50 Rat: > 5,000 mg/kg; OECD Test Guideline 401
Skin corrosion/irritation	Primary irritation (Rabbit): 0 (Max. score is 8.0.); OECD Test Guideline 404 Not irritating (literature value)
Serious eye damage/eye irritation	Primary irritation (Rabbit): 2 (Max. score is 11.0.); OECD Test Guideline 405 Not irritating (literature value)
Respiratory or skin sensitisation	Guinea pig: not sensitizing; Maximisation Test (literature value)
Germ cell mutagenicity	Genotoxicity in vitro: Result: In vitro tests did not show mutagenic effects (literature value) Genotoxicity in vivo: Result: In vivo tests did not show mutagenic effects (literature value) Assessment Mutagenicity: Based on available data, the classification criteria are not met.
Reproductive toxicity	Reproductive toxicity: Rat; Oral; 6 months; NOAEL (parents): 1,000 mg/kg (literature value) Assessment Reproductive toxicity: Based on available data, the classification criteria are not met. Teratogenicity: Rabbit; Oral; OECD Test Guideline 414 NOAEL (teratogen): 2,000 mg/kg NOAEL (maternal): 2,000 mg/kg (literature value) Assessment teratogenicity: Based on available data, the classification criteria are not met.
STOT - single exposure	The substance or mixture is not classified as specific target organ toxicant, single exposure.
STOT - repeated exposure	Rat; Oral; 6 months; NOAEL: 1,000 mg/kg (literature value)
Aspiration toxicity	Not applicable
Carcinogenicity	Assessment carcinogenicity:

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Contains no ingredient listed as a carcinogen

SECTION 12 ECOLOGICAL INFORMATION

Toxicity to fish	(Oncorhynchus mykiss (rainbow trout)) 96 hours; OECD Test Guideline 203 In the range of water solubility not toxic under test conditions. (literature value)
Toxicity to aquatic invertebrates	(Daphnia magna (Water flea)) 48 hours In the range of water solubility not toxic under test conditions. (literature value)
Toxicity to algae	In the range of water solubility not toxic under test conditions. (literature value)
Chronic toxicity to fish	No data available
Chronic toxicity to aquatic invertebrates	No data available
Biodegradation	Readily biodegradable. OECD Test Guideline 301B (28 d): > 60 % (literature value)
Bioaccumulative potential	Bioaccumulation is unlikely.
Mobility in soil	immobile
Other adverse effects	Not applicable

SECTION 13 DISPOSAL CONSIDERATIONS

Waste Code	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.
Disposal methods	Dispose of only in accordance with local, state, and federal regulations.

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Empty containers. Empty containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, triple-rinsed, properly bunged and promptly returned to a drum reconditioner, or properly disposed.

SECTION 14 TRANSPORT INFORMATION

DOT not regulated

IATA not regulated

IMDG not regulated

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.**

Alcohols, C16-18, distn. residues

68603-17-8

1-Octadecanol

112-92-5

1-Eicosanol

629-96-9

1-Docosanol

661-19-8

Alcohols, C18-22, distn. residues

1160164-88-4

Alcohols, C12-22, distn. residues

1476777-83-9

A component of this product is the subject of a SNUR (40CFR 721.10885) under TSCA.

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)



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Components

none

Reportable Quantity

Weight percent

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

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	<u>Health</u>	<u>Flammability</u>	<u>Physical Hazard/ Instability</u>
HMIS®	1	2	0
NFPA	1	2	0

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