



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

Components	CAS-No.	Weight percent
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	0 - 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.
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.

NAFOL® 20+BA Alcohol

SECTION 5 FIREFIGHTING MEASURES

FLAMMABLE PROPERTIES

Fire/explosion NFPA Class IIIB combustible liquid.

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. 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). 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.

Storage/Transport pressure Ambient

Load/Unload temperature 53 - 88 °C
128 - 190 °F

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING MEASURES

Ensure adequate ventilation, especially in confined areas.

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.

NAFOL® 20+BA Alcohol

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
Vapour pressure	< 0.075 mm Hg @ 20 °C, 68 °F;
Vapour density	9.3 - 13.2
Density	0.804 g/cm ³ @ 80 °C, 176 °F; DIN 51757;
Specific gravity	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

NAFOL® 20+BA Alcohol

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
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)
Eye damage/irritation	Primary irritation (Rabbit): 2 (Max. score is 110.); OECD Test Guideline 405 Not irritating, (literature value)
Respiratory or skin sensitization	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.

NAFOL® 20+BA Alcohol

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:**
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)

Bioaccumulation Bioaccumulation is unlikely.



NAFOL® 20+BA Alcohol

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.

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

OSHA Hazards (HCS 1994)

Non-hazardous substance

TSCA Inventory Listing

Components

Alcohols, C16-18, distn. residues
 1-Octadecanol
 1-Eicosanol
 1-Docosanol

CAS-No.

68603-17-8
 112-92-5
 629-96-9
 661-19-8

NAFOL® 20+BA Alcohol

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

Non-hazardous substance

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

WHMIS hazardous composition: No ingredients are hazardous according to the CPR criteria.

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. Industrial Safety & Health Law (ISHL) Inventory	Not listed
Canada. Domestic Substances List (DSL) Inventory	Listed
Canadian Non-Domestic Substance Listing (NDSL)	Not listed
European Inventory of Existing Commercial Chemical Substances (EINECS) Listing	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 Chemicals (NZIoC)	Not listed



NAFOL® 20+BA Alcohol

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

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

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