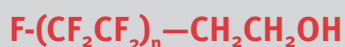


DuPont™ Zonyl® BA-N

PERFLUOROALKYL-1-ETHANOL (C6-C18)



DuPont™ Zonyl® BA-N is a fluorinated telomer alcohol used in preparing surfactants, repellents, lubricants, and other high performance fluorinated products. It is part of a large family of fluorinated specialty monomers offered by DuPont. For information on other Zonyl® monomers, contact us or visit our website at www.zonyl.dupont.com.

Specifications

Property	Limit, wt%	Typical value, wt%
Total of all 2-perfluoroalkyl ethanols	92.0 min.	95.0
2-perfluorohexyl ethanol	5.5 max.	1.0
2-perfluorooctyl ethanol	40.0 max.	50.0
2-perfluorodecyl (and higher) ethanols	18.5 max.	15.0
2-perfluoroalkyl ethyl iodides	4.0 max.	3.0
Water	0.05 max.	0.02

Appearance: tan solid

Uses

Zonyl® BA-N is a valuable monomer for products requiring low surface energy, chemical stability, and increased surface lubricity. Zonyl® BA-N is an effective nucleophile for the synthesis of esters, ethers, phosphates, ethoxylates, urethanes, and siloxanes. In addition to Zonyl® BA-N, DuPont offers the related products Zonyl® BA, BA-L and BA-LD. These differ slightly in composition and solubility. Below is a partial list of applications for Zonyl® BA-N fluoroalcohol.

- Liquid Crystals derived from naphthalene esters (JP3830185), polyimides (JP08208836), azo-type dichroic dyes (JP07278551), or benzoate esters (JP06172266).
- Cosmetic additives including phosphate esters (US6747116, US5344930, US5004825), fluoropolyethers (JP2001048771), or fatty acid esters (JP07138145) for skin care.
- Surfactants including phosphates (JP2003286290, WO9221688) and quaternary amines (JP2003238500), and advanced applications including supercritical CO₂ (WO2000035998).
- Medical applications including contrast agent formulations containing paramagnetic and diamagnetic perfluoroalkyl compounds for magnetic resonance tomography (US2006093554) and pharmaceutical agents in tumor therapy and interventional radiology (WO9730969).
- Lubricants for magnetic recording surface using perfluoropolyether lubricants (JP2006190393), partially fluorinated diesters (US6989356), and amine polyesters (JP2003277336).
- Fluorosiloxanes for antiglare and repellent films (JP3728752, US5621042), for anti-block and antifoaming agents (US5834613), as surface modifiers for resins and rubber (JP3598552), and for skin care and sunscreens (JP06234858).
- Fluorinated urethanes providing repellency and stain resistance for leather (JP2005336637), anti-block coatings for air bags (JP2002265863), and nonstick metal coatings (JP2628371).
- Fatty acid esters as waxes for skis (US5131674), fluorinated photoinitiators for polymerization (WO2003066693), ester-ureas as organic gellation agents (JP2006096821), resins for optics applications (US2005282996), and both internal and external mold release agents (JP20042772980, JP03091566).



The miracles of science™

Typical Physical Properties*

Property	Value
CAS Name	Alkyl Alcohols, 1,1,2,2-tetrahydroperfluoro-1-alkanols (C6-C18)
Other Name	Zonyl® BA-N
Formula	F-(CF ₂ CF ₂) _n -CH ₂ CH ₂ OH
Molecular weight	528
Form	Solid
Color	Tan
Odor	Waxy
Boiling Point, °C (°F)	145–245 (293–473)
Melting Point, °C (°F)	55–65 (131–149)
Fluorine, %	71.3
Specific Gravity	1.7 at 90°C
Thickening Point, °C	65–75
Viscosity, cP/°C	Not determined
Flash Point	Self extinguishing

* This table gives typical properties based on historical production performance. DuPont does not make any express or implied warranty that this product will continue to have these typical properties.

Handling

DuPont™ Zonyl® BA-N is a skin and eye irritant. Care should be taken to avoid exposure by wearing appropriate gloves, safety glasses, and other protective equipment as needed. Refer to the MSDS for further handling information.

Packaging and Shipping Information

Zonyl® BA-N is not regulated by DOT, IMO or IATA. It is available in net 181.6 kg (400 lb) drums and also in net 22.7 kg (50 lb) pails.

Contact Us

For orders, samples, or technical inquiries, contact any of these locations world-wide:

United States

Phone 800-255-4596 (toll-free)
706-937-7446
Mail DuPont Chemical Solutions Enterprise
Customer Service Center, BMP 23
Wilmington, DE 19899 USA
Website www.zonyl.dupont.com

Regional Offices — Contact the office nearest you:

Asia Pacific	Phone
DuPont Kabushiki Kaisha	81 3 5521 8670
DuPont (Korea) Inc	82 2 2222 5309
DuPont China Holding Co Ltd	0086-65058000-1010
DuPont Asia Pacific (Hong Kong)	852 2 734 5345
DuPont Company (Singapore) Pte Ltd	65 6586 3626
DuPont Malaysia	603 5569 3006
DuPont Phillipines	632 818 9911
DuPont Australia Ltd	61 2 9923 6111

Europe/Mideast/Africa

DuPont de Nemours (Germany) +49 7146 288460

North/South America

DuPont Canada, Inc 905 821 5912
DuPont do Brasil 55 11 4166 8337

The information set forth herein is furnished free of charge and was prepared as a possible aid to use when considering DuPont products. Anyone intending to use recommendations or information contained in this handout should first be satisfied that the information is suitable for their application and meets all safety and health standards appropriate for their intended use. DUPONT MAKES NO WARRANTIES, EXPRESS OR IMPLIED, AND ASSUMES NO LIABILITY, IN CONNECTION WITH THE USE OF THIS INFORMATION. Always read the label and product information including MSDS before use.

Copyright © 2007 DuPont. The DuPont Oval Logo, DuPont™, The miracles of science™, and Zonyl® are registered trademarks or trademarks of E.I. du Pont de Nemours and Company or its affiliates. All rights reserved.

K-17023 (07/07) Printed in the U.S.A.

DuPont Chemical Solutions Enterprise



The miracles of science™