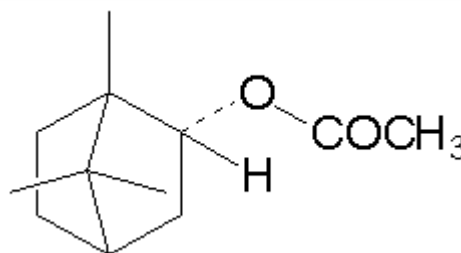


## SPECIFICATION SHEET

**VERSION** 8,00 **VERSION DATE** 08/02/19 **PRINT DATE** 27/10/20

**PRODUCT** BORNYL ACETATE  
**APPLICATIONS** Raw material for industrial use intended for the manufacture of flavours and/or fragrances.  
**IUPAC NAME** (1R,2S,4R)-1,7,7-TRIMETHYLBICYCLO[2.2.1]HEPTAN-2-YL ACETATE  
**SYNONYMS**

**FORMULA** C12 H20 O2  
**MOLECULAR WEIGHT** 196,29  
**CAS** 76-49-3  
**CAS 2** 5655-61-8  
**EINECS** 200-964-4  
**EINECS 2** 227-101-4  
**FEMA** 2159  
**TARIFF NUMBER** 2915390090



**FOOD GRADE CERTIFICATE** AVAILABLE ON REQUEST  
**REACH REGISTRATION NO.** 01-2120062932-55, 01-2119901856-34

## SPECIFICATIONS

**ASPECT AT 20° C** CLEAR MOBILE LIQUID/SOLID  
**COLOUR** COLORLESS TO PALE YELLOW  
**ODOUR** PINE, CAMPHORACEOUS, HERBAL, BALSAM  
**TASTE**  
**DENSITY A 20° C (g / ml)** 0,978 - 0,988  
**DENSITY 25/25** -  
**REFRACTIVE INDEX nD20** 1,4620 - 1,4660  
**REFRACTIVE INDEX nD25** -  
**OPTICAL ROTATION (°)** -25,00 / 0,01  
**BOILING POINT (°C)** 226 - 227 (760 mm Hg)  
**MELTING POINT (°C)** CA. 10-30°C  
**FLASH POINT (°C)** 100,00  
**ASSAY (% GC)** BORNYL AC.+ISOBORNYL AC. >98%; BORNYL AC. >66%  
**ACID VALUE (mg KOH/g)** < 0.5  
**SOLUBILITY** NEARLY INSOLUBLE IN WATER  
**VAPOUR PRESSURE** NOT DETERMINED  
**OTHER SOLUBILITIES** SOLUBILITY IN ETHANOL 70%: APPROX. 1 : 2,5-3

**OTHER TECHNICAL DATA** ISOBORNYL ACETATE 10-35%

## STABILITY AND STORAGE

KEEP IN TIGHTLY CLOSED CONTAINER IN A COOL AND DRY PLACE, PROTECTED FROM LIGHT. WHEN STORED FOR MORE THAN 24 MONTHS, QUALITY SHOULD BE CHECKED BEFORE USE.

WE BELIEVE THE ABOVE INFORMATION TO BE CORRECT BUT WE DO NOT PRESENT IT AS ALL INCLUSIVE AND AS SUCH SHOULD BE USED AS A GUIDE. IT IS THE SOLE RESPONSIBILITY OF THE RECEIVER OF OUR PRODUCT TO COMPLY WITH EXISTING REGULATIONS AND INSTRUCTIONS.

THIS PRODUCT HAS NOT BEEN FILTERED DUE TO TECHNOLOGICAL REASONS. WE RECOMMEND NOT TO USE IT UNLESS FILTERED WHEN USED AS A RAW MATERIAL IN FOOD INTENDED FOR FINAL CONSUMERS.