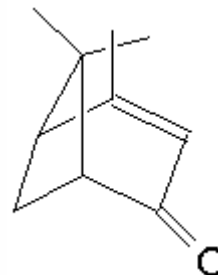


## SPECIFICATION SHEET

**VERSION** 3,00 **VERSION DATE** 19/09/22 **PRINT DATE** 05/05/24

**PRODUCT** VERBENONE-L  
**APPLICATIONS** Industrial raw material not intended for direct use.  
**IUPAC NAME** (1S)-4,6,6-TRIMETHYL-BICYCLO(3.1.1)HEPT-3-EN-2-ONE  
**SYNONYMS** S-VERBENONE, L-VERBENONE

**FORMULA** C<sub>10</sub> H<sub>14</sub> O  
**MOLECULAR WEIGHT** 150,00  
**CAS** 1196-01-6  
**CAS 2** 80-57-9  
**EINECS** 214-807-2  
**EINECS 2** 201-292-4  
**FEMA** 4216  
**TARIFF NUMBER** 2914290090



**REACH REGISTRATION NO.** On request. REACH and non-REACH material available for this product.

## SPECIFICATIONS

**ASPECT AT 20°C** CLEAR MOBILE LIQUID  
**COLOUR** COLORLESS TO PALE YELLOW  
**ODOUR** BALSAMIC, SPICY, MINT, CAMPHOR, HERBAL  
**TASTE** SPICY, DRY, WOODY  
**DENSITY AT 20°C (g / ml)** 0,970 - 0,980  
**DENSITY 25/25** -  
**REFRACTIVE INDEX n<sub>D20</sub>** 1,4900 - 1,5000  
**REFRACTIVE INDEX n<sub>D25</sub>** -  
**OPTICAL ROTATION (°)** -220,00 / -130,00  
**BOILING POINT (°C)** 227 - 228  
**MELTING POINT (°C)** -  
**FLASH POINT (°C)** 85,00  
**ASSAY (% GC)** SUM OF ISOMERS L+D > 95 (L IS THE MAJOR ONE)  
**ACID VALUE (mg KOH/g)** -  
**SOLUBILITY** INSOLUBLE IN WATER  
**VAPOUR PRESSURE** NOT DETERMINED  
**OTHER SOLUBILITIES** SOLUBLE IN ETHANOL

**OTHER TECHNICAL DATA** ISOMER L-(S) > 80% APPROX. (CAS 1196-01-9, EINECS 214-807-2); ISOMER D-(R) < 20% APPROX. (CAS 18309-32-5; EINECS 242-195-7). RACEMIC WOULD BE CAS 80-57-9, EINECS 201-292-4.

## STABILITY AND STORAGE

KEEP IN TIGHTLY CLOSED CONTAINER IN A COOL AND DRY PLACE, PROTECTED FROM LIGHT. WHEN STORED FOR MORE THAN 48 MONTHS, QUALITY SHOULD BE CHECKED BEFORE USE.  
 KEEP BETWEEN 15-20°C. IT CAN CONTAIN 0,1% SYNTHETIC ALPHA-TOCOPHEROL

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 TECHNICAL REASONS. WE RECOMMEND NOT TO USE IT UNLESS FILTERED WHEN USED AS A RAW MATERIAL IN FOOD INTENDED FOR FINAL CONSUMERS.