

## Technical data sheet

### Diacetin (GDA)

Version: February 2009

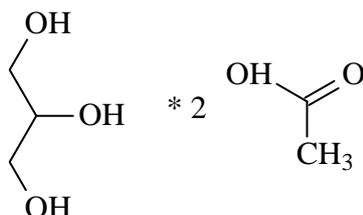
#### Synonyms

Diacetin, Glycerol Diacetate

#### Formula

$C_3H_8O_3$  (glycerol) \*2  $C_2H_4O_2$  (acetic acid)

#### Structural formula



**Molecular weight:** 176

#### CAS number

25395-31-7

#### EINECS number

246 941 2

#### Product specification

Characteristics	Unit	Value	Method*
Appearance		Clear Liquid, free from suspended matter	Visual
Colour	APHA/Hazen	<= 50	AM 018
Odour		Characteristic	AM 074
Acidity as acetic acid	%	<= 0.05	AM 006
Water content	%	<= 0.2	AM 023
Saponification Value		605-635	AM 999

\* Internal methods available upon request.

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**Polynt SpA – Headquarter**  
Via Enrico Fermi, 51  
I-24020 Scanzorosciate (Bg) Italy  
Tel. +39 035 652770  
Fax +39 035 652814

**Polynt SpA**  
Via Abate Bertone, 10  
13881 Cavaglia (BI) Italy  
Tel. +39 01 61996611  
Fax. +39 01 61996623

**Polynt UK Ltd**  
Station Road - Cheddleton Nr Leek  
Staffordshire ST13 7EF UK  
Tel. + 44 1538 369000  
Fax. + 44 1538 361330

## Typical properties

Characteristics	Unit	Value
Boiling point @ 760 mmHg	°C	260
Density @ 20 °C	g/ml	1.18
Melting Point	°C	-30
Flash point (closed cup)	°C	110

## Main applications

Main applications for GDA are:

- Polynt's diacetin is a mixture of the acetic acid esters, as shown in the following table:

Chemical name	Typical Concentration (% w/w)
1,2,3-Propanetriol triacetate	33
1,2,3-Propanetriol, 1,2-diacetate	16
1,2,3-Propanetriol, 1,3-diacetate	32
1,2,3-Propanetriol, 1-acetate	14
1,2,3-Propanetriol, 2-acetate	2
1,2,3-Propanetriol	3

- Diacetin is used widely as a food additive for the solvency of flavourings. It's used, either on its own or in conjunction with triacetin or other esters/additives, as a curing agent for Sodium silicate or phenol-formaldehyde resins systems and as hydrolysable acidulant in the dyeing of polyester and other fabrics with acid dyestuffs.

## Handling

Packaging: Steel drums 240 kg net.  
IBC 1100 kg net  
Bulk

Storage: The packaged material shall be kept into its original packaging, in cool and well ventilated place, neither under rain nor in wet places, away from flames and heating sources. The bulk material shall be stored in stainless steel tanks, under nitrogen blanketing; for a long lasting quality the material shall be kept at ambient temperature (ideally not above 30°C) and away from any flame or concentrated heat source

Shelf life: 2 years from production date.

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