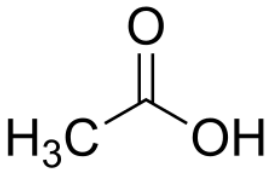
Acetic Acid Food Grade E 260 – Europe
Product Quality, Regulatory & Technical Information Package

June 2025

Product Name: **Acetic Acid Food Grade E 260 – Europe**



Chemical Name:	Acetic Acid
CAS number:	64-19-7
Celanese (bulk) Material number:	50000989

A 80-%-blend of the Product with demineralized drinking water is available from Celanese.

Disclaimer

This document provides information about food grade Acetic Acid ("Product") produced by Celanese and its affiliates ("Celanese" or "we"). The information presented in this document is based on our present state of knowledge and is intended to provide general notes on the Product and its intended uses. It does not constitute a guarantee of any specific properties of the Products described herein or its suitability for a particular application. The customer must make the sole determination whether the Product is suitable for the desired use. Celanese undertakes no obligation to update the information in this document.

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General

Further literature to the Product, such as Safety Data Sheet, Brochures and Specifications can be retrieved from Celanese website www.celanese.com.

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Product Description

Acetic Acid is a clear, colorless liquid with an acrid taste and a pungent, vinegar-like odor. It is miscible in all proportions with water, ethyl alcohol, ether and other organic solvents, but is insoluble in carbon disulfide.

Acetic Acid is very corrosive and may react quickly, under certain conditions, resulting in rapid evolution of heat. Acetic Acid is stable under recommended storage conditions. Acetic Acid will burn when heated or exposed to an ignition source. It is one of the most important large-volume, synthetic organic acids.

Acetic Acid Food Grade E 260 is a classic preservative and acidifier in the Food industry. It is listed as additive number E 260 in the European Regulation (EC) No 1333/2008.

A 80 % (w/w) blend of the Product with demineralized drinking water is available from Celanese.

Acetic Acid Food Grade E 260 and its salts are used as an additive, primarily as a preservative, in canned vegetables, canned fish, infant formula and dairy products. It can also be added to bread, it is sometimes used as a substitute for sourdough.
It is also an important flavor carrier. Another important use of Acetic Acid Food Grade E 260 is as acidifier in food products or in food product manufacturing to lower the pH value.

Due to its antimicrobial effect, Acetic Acid Food Grade E 260 can prevent formation of several bacteria, mould and yeast in food products.

Physical properties

Data are intended for the purpose of product description and are not the subject of continuous monitoring. Further physical properties and characteristic data as well as information on safety and handling are listed in the safety data sheet and the sales specifications. Please consult www.celanese.com.

Property (Grade: 99/100 %)		Metric Units	English Units
Autoignition Temperature		463 °C	865 °F
Boiling Point @ 101.3 kPa (14.69 psi)		118.1 °C	244.6 °F
Critical Pressure [1]		5.786 MPa	839.2 psia
Critical Temperature [1]		321.45 °C	610.6 °F
Dielectric Constant @20 °C (68 °F) [1]		6.194 F/m	
Dissociation Constant @25 °C (77 °F) [3]		4.76	
Evaporation Rate (n-Butyl Acetate = 1)		0.97	
Flash point [4]	Conc.: 100 vol %	39.5 °C	103.1 °F
(EN ISO 2719 Method A –	Conc.: 95 vol %	44.5 °C	112.1 °F
Pensky Martens in closed cup)	Conc.: 90 vol %	51 °C	123.8 °F
	Conc.: 85 vol %	54 °C	129.2 °F
	Conc.: 80 vol %	59 °C	138.2 °F
	Conc.: 40 vol %	none	none
Heat of Combustion		14.4 MJ/kg	
Heat of Vaporization (@ boiling point, atmospheric) [2]		404.32 kJ/kg	173.9 Btu/lb_m
Liquid Specific Heat @19.4 °C (66.9 °F) [1]		2.044 kJ/(kg·K)	0.4883 Btu/(lb_m·°F)
Liquid Thermal Conductivity @ 20 °C (68 °F) [2]		0.161 W/(m·K)	0.0931 Btu/(hr·ft·°F)
Molar mass		60.05 g/mole	
Refractive Index n_D^{20}		1.372	
Solubility @20 °C (68 °F) wt%, Acid in Water		Complete	
Solubility @20 °C (68 °F) wt%, Water in Acid		Complete	
Solubility in alcohol, benzene, diethylether, acetone		Complete	
Solubility in carbon disulfide [1]		Insoluble	
Surface Tension @25 °C (77 °F)		27.1 mN/m	
Vapor Pressure @ 20 °C (68 °F) [1]		15.7 mbar	0.31 psia
Vapor Pressure @ 50 °C (122 °F)		77 mbar	1.12 psia

Acetic Acid [% (w/w)]	Acetic Acid [g/l]	Acetic Acid [mole/l]	Density at 20 °C (68 °F) [5] [g/cm³]	Solidification point [°C (°F)] [6]	Viscosity at 25 °C (77 °F) [7] [mPa·s]
100	1050	17.48	1.0491	16.63 (61.93)	1.0560
99	1042	17.35	1.0519	14.80 (58.64)	1.2477
98	1034	17.22	1.0540	13.40 (56.12)	1.3784
97	1025	17.04	1.0559	12.03 (53.65)	1.4976
96	1016	16.92	1.0577	10.69 (51.24)	1.6059
95	1007	16.77	1.0593	9.37 (48.87)	1.7042
90	959.5	15.98	1.0653	3.18 (37.72)	2.0638
85	908.6	15.13	1.0687	-2.46 (27.57)	2.2518
80	856.0	14.25	1.0701	-7.68 (18.18)	2.3211
70	748.0	12.46	1.0691	-17.31 (0.84)	2.2532
60	638.5	10.63	1.0646	-25.34 (-13.61)	2.0653
50	528.8	8.81	1.0575	-20.04 (-4.07)	1.8510
40	419.5	6.99	1.0484	-15.18 (4.68)	1.6408
30	311.5	5.19	1.0377	-10.76 (12.63)	1.4376
20	205.3	3.42	1.0258	-6.77 (19.81)	1.2400
10	101.3	1.69	1.0131	-3.22 (26.20)	1.0539
5	50.28	0.84	1.0061	-1.61 (29.10)	0.9688

Glacial Acetic Acid - Vapor Pressure [1]						
T (°C)	T (°F)	P (mbar)		T (°C)	T (°F)	P (mbar)
0	32	4.7		150	302	2461
10	50	8.5		160	320	3160
20	68	15.7		170	338	4041
30	86	26.5		180	356	5091
40	104	45.3		190	374	6333
50	122	74.9		200	392	7813
60	140	117.7		210	410	9612
70	158	182.8		220	428	11733
80	176	269.4		230	446	14249
90	194	390.4		240	464	17057
100	212	555.3		250	482	20210
110	230	776.7		260	500	23854
118.2	245	1013		270	518	28077
130	266	1386.5		280	536	32801
140	284	1841.1				

Glacial Acetic Acid - Liquid Density [1]						
T (°C)	T (°F)	Density (g/cm³)		T (°C)	T (°F)	Density (g/cm³)
20	68	1.0491		130	266	0.9235
26	79	1.0420		139	282	0.9119
34	93	1.0324		140	284	0.9092
52	126	1.0134		145	293	0.9030
60	140	1.0060		156	313	0.8889
63	145	1.0007		180	356	0.8555
75	167	0.9875		220	428	0.7941
85	185	0.9761		260	500	0.7136
97	207	0.9611		300	572	0.5950
100	212	0.9599		320	608	0.4615
107	225	0.9506		321	610	0.3506
117	243	0.9391				

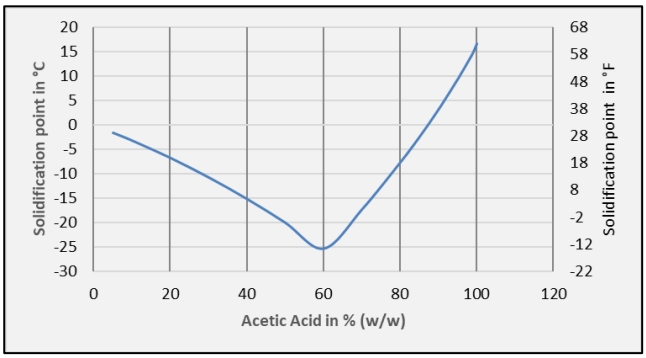

Figure 1: Solidification Point as a function of Acetic Acid concentration (blends with water)

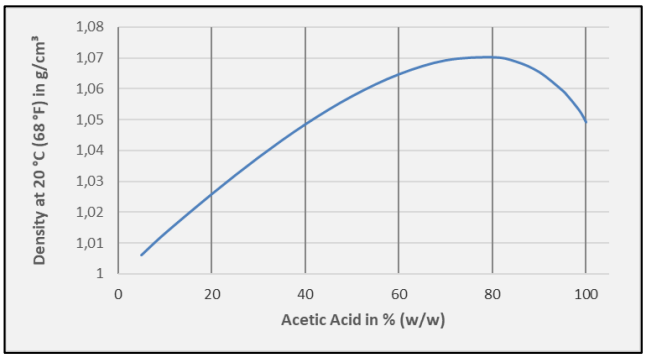

Figure 2: Density as a function of Acetic Acid concentration (blends with water)

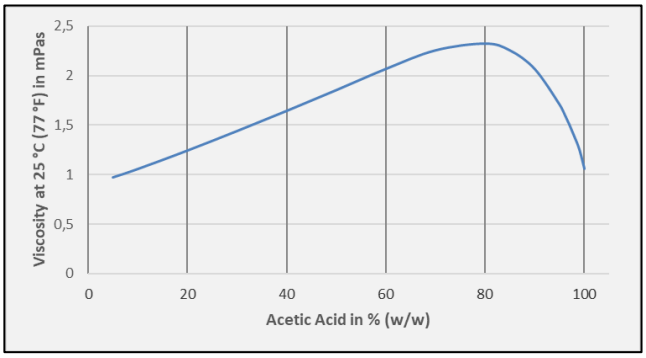

Figure 3: Viscosity as a function of Acetic Acid concentration (blends with water)

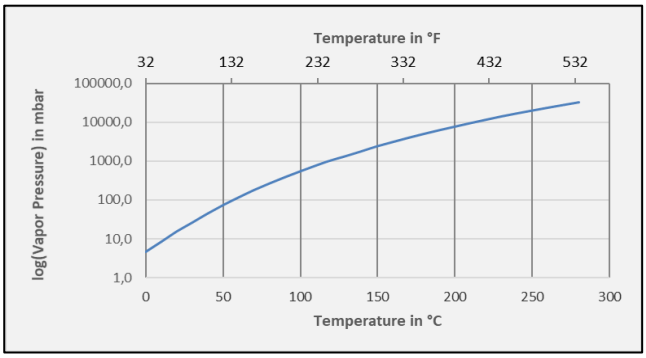

Figure 4: Vapor Pressure (log) as a function of Temperature (Glacial Acetic Acid)

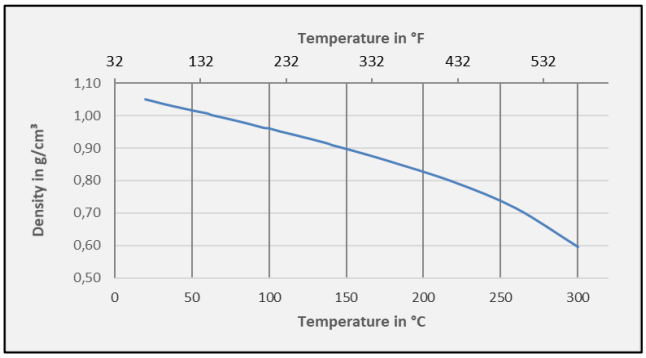

Figure 5: Density as a function of Temperature (Glacial Acetic Acid)

Storage and Handling Recommendations

Storage

Recommended Blanketing	Air[a,b] or Dry Nitrogen[c]	
Recommended Temperature		
Maximum (Glacial)	100° F	(37.8° C)
Minimum (Glacial)	65° F	(18.3° C)
Minimum (56 %)	0° F	(-17.8° C)
Minimum (70%)	10° F	(-12° C)
Minimum (84%)	32° F	(0° C)
Recommended pressure	Atmospheric	
Bulk Quantities	Outside, detached tanks	
Small Containers	Cool, dry, well ventilated area	

a. Refer to National Fire Protection Agency (NFPA) #77 "Static Electricity" or the respective national technical code for proper electrical grounding procedures.
b. See the National Fire Protection Agency (NFPA) #30 "Flammable and Combustible Liquids Code" or the respective national technical code and consult with qualified fire protection specialists to determine specific storage tank design requirements.
c. Blanketing may be used to retain quality in long-term storage conditions.

Handling

- Thoroughly review Safety Data Sheet before handling product.
- Protect small containers from physical damage. Keep containers closed when not in use. Open containers slowly to allow any excess pressure to vent.
- Keep away from heat, sparks, flame or other sources of ignition. Use spark-resistant tools.
- See the National Fire Protection Agency (NFPA) #30 "Flammable and Combustible Liquids Code" or the respective national technical code and consult with qualified fire protection specialists to determine specific storage tank design requirements.
- Use proper electrical grounding and bonding procedures when loading, unloading and transferring. Refer to the National Fire Protection Agency (NFPA) #77 "Recommended Practice for Static Electricity" or the respective national technical code for proper electrical grounding procedures.
- Electrical equipment and circuits in all storage and handling areas must conform to requirements of national electrical code (Articles 500 and 501) or the respective national technical code for hazardous location.
- Blanketing may be used to retain quality in long-term storage conditions.
- For further information on safety and handling, please use the following link: https://www.celanese.com/sds-search

Packaging

The following containers are suitable for handling and transportation of the Product:

- DOT 111A60AL1 or 111A100W6 Insulated Tank Cars
- DOT MC 307 or DOT 407 Tank Trucks
- IMO 1 ISO Tank

The packaging and equipment used for handling and transportation of the Product must be suitable for food use. The Tank Car, Tank Truck or ISO Tank used for transportation must bear the placard "foodstuff only", and shall only be loaded in previously cleaned and dried packaging and equipment.

A 80 % (w/w) blend of the Product with demineralized drinking water is available from Celanese.

As Celanese offers the Product as bulk material only, no packaging certificate is available. Product labels are not in use for bulk material.

Materials of Construction

Unit / element	Acceptable Material	Alternate Material
Tank	Stainless Steel [a]	Stainless Steel [b]
Piping	Stainless Steel [a]	Stainless Steel [b]
Valves	Stainless Steel [a]	Stainless Steel [b]
Pumps	Stainless Steel [a]	Stainless Steel [b]
Relief Valves	Stainless Steel [a]	Alloy 20
Gaskets	Glass filled PTFE [e]	Graphite with Stainless Steel [a] Insert
Pump Seals	Single Mechanical Seal: Stainless Steel / Hastelloy C-276 metallic components [c], Kalrez O-rings	–
Valve Packing	PTFE [e]	Graphite
Pipe End Connections	Butt welded and flanged system	
Heat Exchanger	Product side: Stainless Steel [a, f]	Product side: Stainless Steel [b]
Hoses	Stainless Steel [a]	Stainless Steel [b]
Tank Truck	Stainless Steel [a, b]	Aluminum [d]
Tank Car	Stainless Steel [a, b]	Aluminum [d]
ISO Tank	Stainless Steel [a, b]	–
Barge	Stainless Steel [a, b]	–
Ship Tank	Stainless Steel [a, b]	–

a. Type 316, 316L/316 Dual Grade, or 2205 Stainless Steel
b. Type 304 or 304/304 Dual Grade Stainless Steel when temperature does not exceed 140 °F (60 °C).
c. Use Alloy-C-276 seal components for long service life.
d. Use 3000, 5000, 6000 series Aluminum when temperature does not exceed 120 °F (49 °C).
e. Polytetrafluoroethylene
f. For higher than 150°F (65 °C) metal temperatures consult a metallurgist.

Product Quality Statements

Manufacturing Locations

The Product is produced at manufacturing location in Frankfurt (Germany).

- Frankfurt Plant
  Industrial Park Frankfurt-Hoechst
  Brueningstr. 50
  65926 Frankfurt
  Germany

ISO Certification

The Product is a food grade material produced under ISO 9001 and ISO 14001 rules. Certificates are available at Celanese web page (Select Filter "Intermediate Chemistry" and additional filters to retrieve the Certificate from the respective Manufacturing site):
https://www.celanese.com/en/certificate-search

Analytical Methods

Applied analytical methods according to the sales specifications provided as attachment.

Specifications	Analytical Methods
Acetic Acid	Calculated from Freezing Point / ISO 753/2 [1]
Freezing Point	ASTM D 1493 / HAC-STD-001EX (internal)
Water	DIN 51 777 / ASTM D 1364 (mod. Karl-Fischer-Method)
Color	DIN EN 1557 / DIN ISO 6271 / ASTM D 1209 / ASTM 5386
Formic Acid	ASTM D 3546
Acetaldehyde	DIN 51 405 (GC)
Iron	Photometric / ICP-MS
Heavy Metals as Lead	Sulfide Method
Lead	ICP-MS
Arsen, Mercury (each)	ICP-MS
Total Sulfur	ASTM D 3961
Total Chlorine	DIN 51 408
Permanganate Time / Oxidizable Impurities	FCC (Acetic Acid Monograph, edition acc. to sales specification in the Annex)
Density at 20 °C	DIN 51 757, Method D
Evaporation Residue	FCC (see remark above) / DIN 53 172 / ASTM D 1353
Appearance	Visual Examination

[1] ISO 753/2 for Acetic Acid Food Grade 80 %.

Specification

The Product is supplied according to Celanese Sales Specifications. A copy of the Sales Specifications is attached to this dossier.

1. Celanese has a product traceability and withdrawal/recall program in place as part of the Crisis Management Procedure for Acetic Acid Food Grade E 260.
2. The Product meets the requirements of European Community Regulation (EC) 178/2002, Regulation (EC) 231/2012 (E 260, Acetic Acid) and Regulation (EC) 852/2004 (HACCP-based).
3. The Product meets the requirements of the Food Chemicals Codex acc. to the sales specification in the Annex.
4. The Product meets the purity requirements of the European Pharmacopoeia (Ph. Eur.) acc. to the sales specification in the Annex.
5. The Product fulfills the requirements of DIN EN 13194.
6. The Product is not manufactured under GMP rules.
7. The Product is not manufactured under GMP+ rules, and is not supplied as a Feed grade.
8. Celanese makes no nutrition statement for the Acetic Acid Food Grade E 260.

Manufacturing Process & Raw Materials

Polyvinyl Acetate transfers with methanolic Sodium Hydroxide to Polyvinyl Alcohol and Methyl Acetate.

Methyl Acetate hydrolyses under catalysis to Methanol and Acetic acid.
The Acetic acid is purified by different distillation steps up to Acetic Acid 99/100%.

The Manufacturing, Storage and Loading facilities operate in closed and dedicated equipment[2] on a continuous basis.

Celanese does not use raw materials of animal origin. During the manufacturing process, the material does not come into contact with materials of animal origin. The raw materials are fully synthetic[3].

No metal or metal-organic catalysts are used for the final production step of the Product.

Ethylene Oxide

The Product is manufactured synthetically with raw materials of petrochemical origin in dedicated plants. The Product has not been treated with ethylene oxide and none of the raw materials used in the production of the Product have been treated with ethylene oxide, nor can ethylene oxide and 2-chloroethanol be generated during the production process. The presence of ethylene oxide and the breakdown product 2-chloroethanol can therefore be ruled out.

The Product is in accordance with our specifications and meets the requirements of the European Commission Regulation (EU) No 231/2012 covering Commission Regulation (EU) 2022/1396 of 11. August 2022 regarding the presence of ethylene oxide in food additives.

[2] All stages of production and processing are designed in a way that there is preferably no unintended presence of non-vegan or non-vegetarian substances.

[3] At no stage of production and processing, use has been made of or the product has been supplemented with: - ingredients (including additives, carriers, aromas, fragrances, flavourings and enzymes) or - processing aids or - substances which are not additives but are used in the same way and with the same purpose as processing aids in either processed or unprocessed form that are of animal origin.

Shelf Life

The shelf life of the Product and its water blends is one year.

The shelf life dates from the date of packaging, and for bulk deliveries this is the date of loading. This period is in general applicable to material

- packaged in discrete containers such as drums or bulk containers and
- stored under conditions recommended by Celanese.

For the Product this entails storage at ambient temperatures in tightly sealed, undamaged containers in a cool and well-ventilated place under dry air or dry nitrogen blanket. Blanketing may be used to retain quality in long term storage conditions, especially to prevent access of humidity.

Most Products will have a longer useful life, but should be examined by the owner at its sole responsibility at the end of the recommended storage life to determine purity and condition of Product. Bulk storage life, under recommended storage conditions, may be longer if the Product is routinely monitored for specific indications of the condition of the material, or if the Product in the tank is removed and replenished with fresh material on a routine basis. Any use of the Product after expiration of the shelf life is the sole responsibility of the buyer.

Kosher

The Product is supplied as a Kosher certified grade. Contact your Sales Representative for more information.

Halal

The Product is not available as a certified Halal grade.

Celanese supplies basic chemicals. Our production technology relies on a continuous production process, and the raw materials are of petrochemical origin. All catalysts and processing aids are of synthetic origin; we do not use any raw materials having an animal (diary) origin, nor is our process likely to be contaminated by such. Ethanol is not used as raw material or processing aid.

ICH Guidelines

The Product does not, based on Celanese's knowledge, contain solvents in the concentration limits specified by the ICH Guideline Q3C(R9) for residual solvents.
The Product itself is defined as a class 3 solvent by the ICH Guideline for residual solvents.

The Product does not, based on Celanese's knowledge, contain metals in the concentration limits specified by the ICH Guideline Q3D for elemental impurities.
Normal trace levels of metals may be found in the Product. Selected metals are part of Celanese's Sales Specification for the Product, and routinely monitored as part of the Regulatory requirement of the E 260 regulation and the Food Chemicals Codex.

The Product does not contain intentionally added sources of biological substances as described in ICH: Q5A (R2): Viral safety evaluation of biotechnology products derived from cell lines of human or animal origin.

Hazard Analysis and Critical Control Points (HACCP)

A HACCP plan is properly documented and implemented in conformance to (EC) 852/2004. The HACCP is in conformance with the Codex Alimentarius, and is carried out on the basis of Failure Mode and Effects Analysis (FMEA).
Details of the HACCP can be reviewed only under a confidentiality agreement.

Based on the conducted FMEA's, Control Points (CP) and Critical Control Points (CCP) have been identified and are monitored frequently. The HACCP Team meets minimum two times per year to review the performance and effectiveness of the HACCP, CP's and CCP's.

Chemical Hazards:
Very Low.
The Product is made in a dedicated, closed, and continuous process, and the Product is distilled directly before storage for shipment.

Biological Hazards:
Very Low.
The substance Acetic acid itself at >99 % purity is toxic to biological organisms.
The water used for blends of the Product is demineralized drinking water, following the requirements from the German "*Trinkwasserverordnung*". The water is additionally checked on a monthly basis for microbiology, sampled close to the loading line.

Physical Hazards:
Very Low.
Acetic acid is made in a dedicated, closed, and continuous process. The liquid product is distilled and filtered directly before storage, and again filtered in the loading line for shipments. Several procedures are in place, amongst others:

- Ensure that tank containers are cleaned and inspected before loading.
- Loaders are trained to look for and prohibit the possibility of contamination during the brief period that a tank container is opened for loading.
- The filter for the loading line is checked before and after loading of the tank container.

Hygiene Program

Since the Product is produced continuously with no line or vessel openings, the potential for human or environmental contamination of the Product is very low.

The only potential exposure is during the opening and closing of tank containers during loading. A specific training program is in place for the loaders to ensure good hygiene and no physical, chemical or biological contamination of the Product.

Radiation

The Product is not subjected to any artificial radiation.

Thawing of Frozen Acetic Acid

Acetic acid freezes at 16.35 °C. The use of steam is a common practice to slowly thaw frozen Acetic Acid (HAC) in pipelines or other containers. Perform this process carefully to avoid damage to the container and any flammability risk. Keep the product away from ignition sources; the flash point of acetic acid is 39 °C (104 °F). Avoid overheating specific zones of the container above the boiling point (118 °C). Take provisions to prevent overpressure of the container since the vapor pressure increases during the heating process. Do not expose the product to direct contact with steam to avoid affecting the product quality (water content). Thawing of frozen HAC under the described recommendations will not affect the quality of the product since it entails only a physical change from solid to liquid phase.

Regulatory Statements

The Product as of this date is not listed in the following regulations:

- Clean Water Act
- Clean Air Act
- CEPA List of Toxic Substances
- EPCRA Section 302
- Department of Homeland Security: Chemicals of Interest
- SARA 313
- California Proposition 65 (January 2025)
- Canada ERAP

The Product is not subject to Chemical Weapons Convention or Drug Precursor Substance reporting.

Animal Testing

This Product grade is a dedicated Food and Food additive product. Therefore the Product was not subject of animal testing for

- cosmetic purposes by or on behalf of Celanese in order to meet the requirements of Regulation (EC) No 1223/2009 on cosmetic products.
- REACH regulation (Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals)
- Biocidal Products Regulation (EC) 528/2012

As a chemical products manufacturer and importer, Celanese is required to participate in the chemical industry's and authorities efforts to ensure the protection of human health and the environment.

Celanese practice is to extensively search internally and externally for existing toxicological information before initiating testing. Where existing information does not exist for relevant endpoints, a comprehensive effort will be made to avoid the use of animals by employing alternative methods. When other means have been exhausted and animal testing may be required to develop data to ensure the protection of health and the environment, scientifically sound techniques to reduce the numbers of animals will be used. All applicable animal welfare laws will be followed to ensure care and compassion are exercised.

BSE/TSE

The Product is not derived from human or animal sources and thus we are not aware of any BSE/TSE.

Genetically Modified Organisms (GMO)

The chemistry to manufacture the Product does not use genetically modified or engineered organisms or biomaterials. No GMO/GME substances are added to the Product.
The Product is not verified through the Non-GMO Project Verification Program.

Global Country Inventories

The substance is listed in the following country inventories:

Chemical Inventory Status	listed	comments
Australia (AIIC)	yes	
Canada (DSL)	yes	
China (IECSC)	yes	
Japan (ENCS)	yes	
New Zealand (NZIOC)	yes	
Philippines (PICCS)	yes	
USA (TSCA)*	yes	active
Korea (KECI)	yes	
Taiwan (TCSI)	yes	
Mexico (INSQ)	yes	

* It is not subject to any action under TSCA Section 4, 5, 6, 8a, 8d, or 12b.

Allergens

The Product does not, based on Celanese's knowledge, contain the following substances and products thereof as per regulation EU 1169/2011:

- Cereals containing gluten (i.e. wheat, rye, barley, oats, spelt, kamut or their hybridised strains) and products thereof, except:
  - wheat-based glucose syrups including dextrose ;
  - wheat-based maltodextrins ;
  - glucose syrups based on barley;
  - cereals used for making distillates or ethyl alcohol of agricultural origin for spirit drinks and other alcoholic beverages.
- Crustaceans and products thereof.
- Eggs and products thereof.

- Fish and products thereof, except:
  - fish gelatine used as carrier for vitamin or carotenoid preparations;
  - fish gelatine or Isinglass used as fining agent in beer and wine.

- Peanuts and products thereof.

- Soybeans and products thereof, except:
  - fully refined soybean oil and fat ;
  - natural mixed tocopherols (E306), natural D-alpha tocopherol, natural D-alpha tocopherol acetate, natural D-alpha tocopherol succinate from soybean sources;
  - vegetable oils derived phytosterols and phytosterol esters from soybean sources;
  - plant stanol ester produced from vegetable oil sterols from soybean sources.
- Milk and products thereof (including lactose), except:
  - whey used for making distillates or ethyl alcohol of agricultural origin for spirit drinks and other alcoholic beverages;
  - lactitol.

- Nuts, i.e. almonds (Amygdalus communis L.), hazelnuts (Corylus avellana), walnuts (Juglans regia), cashews (Anacardium occidentale), pecan nuts (Carya illinoiesis (Wangenh.) K. Koch), Brazil nuts (Bertholletia excelsa), pistachio nuts (Pistacia vera), macadamia nuts and Queensland nuts (Macadamia ternifolia), and products thereof, except:
  - nuts used for making distillates or ethyl alcohol of agricultural origin for spirit drinks and other alcoholic beverages.

- Celery and products thereof.

- Mustard and products thereof.

- Sesame seeds and products thereof.
- Sulphur dioxide and sulphites at concentrations of more than 10 mg/kg or 10 mg/litre expressed as SO2.

- Lupin and products thereof.

- Molluscs and products thereof.

Excluded substances

These substances are not, based on Celanese's knowledge, present in the Product. They are not known to be generated in the production process, nor are we aware of such substances appearing as impurities in the raw materials. However, we do not have a specification for those substances, nor do we analyze for them.
No metals are intentionally added to the product or process. Normal trace levels of metals may be found in the product.

Substances listed in:

- Prohibition of Certain Toxic Substances Regulations, 2012 (SOR/2012-285), as of December 2020
- California Proposition 65 as of December 2023

- US EPA Priority Pollutants under the Clean Water Act as of Dec. 2019
- US EPA List of Ozone-Depleting Substances as of December 2019
- US Hazardous Air Pollutants (HAPS) as of December 2019

- Aflatoxins
- Algaecide / biocide
- Alkyl phenol ethoxylates (APEO)
- Aromatic amines
- Aromatic hydrocarbons
- Asbestos
- Azo compounds
- BADGE (2,2-bis(4-hydroxyphenyl)propane bis(2,3-epoxypropyl) ether)
- BFDGE (bis(hydroxyphenyl)methane bis(2,3-epoxypropyl) ethers)
- Bisphenol A
- Bisphenol F
- Brominated flame retardants
- Butylated hydroxytoluene (BHT)
- Coloring Agents / Dyes
- Cytokines
- Dioxins
- Epoxy compounds
- Ethylene oxide
- Flame retardants
- Fluorochemicals
- Formaldehyde and Formaldehyde releasers
- Glycol ethers
- Gold
- Hybridoma cells
- Jatropha
- Melamine
- Microplastics
- Mineral Oil Aromatic Hydrocarbons (MOAH)
- Mineral Oil Saturated Hydrocarbons (MOSH)
- Monoclonal antibodies
- Nanomaterials
- Nanoparticle-based protein Therapeutics
- Naphthalene
- Natural Latex
- Nitrates
- Nitrogen oxide
- Nitrosamines
- Nitrosating agents
- NOGE (novolac glycidyl ether)
- Organotin compounds
- Ortho phenyl phenol (OPP)
- Ozone depleting substances
- Palm Oils / Palm Kernel Oils
- Paradichlorobenzene (PDCB)
- Per- and polyfluoroalkyl substances (PFAS)[4]
- Pesticides
- Phosphates
- Phthalates
- Pigments
- Plasticizers
- Polybrominated substances
- Polychlorinated substances
- Polyvinyl chloride (PVC)
- Protein subunits
- Radioactive substances
- Sewer sludge
- Silicones
- Subunit vaccines from in-vitro cell culture
- Tantalum
- Tin
- Tribromophenol
- Triclosan
- Tris (nonylphenyl) phosphite
- Tungsten
- Viral vectors and Viral vector derived products

EU REACH

Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)

The application in food or feedingstuffs is exempt from REACH registration according to Article 2 (5) (EC) No 1907/2006.

[4] PFAS as defined by the OECD: PFAS definition published by Organization for Economic Co-operation and Development (OECD) provided at this LINK (last accessed on 25 July 2024) or via DOI 10.1787/e458e796-en

Celanese is aware of the obligations imposed by REACH on EU manufacturers and importers as well as on downstream users.
In case you are interested in REACH registered material for purposes within the REACH regulation please contact your Celanese sales representative or account manager.

Food & Food Contact

Acetic Acid itself is listed in the following regulations for use in food contact applications:

- US FDA 21CFR § 184.1005 and § 582.1005
- Europe BfR
- China GB 9685-2016

Commission Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food

Status: 21st January 2021

Regulation 10/2011/EU as amended applies to the materials and articles specified in Article 2 of this regulation. The Product does not fall under the scope of this regulation.
The component Acetic Acid is generally listed in ANNEX I, Table 1 in the "Union list of authorized monomers, other starting substances, macromolecules obtained from microbial fermentation, additives and polymer production aids" with the following entry

(1)	FCM substance No	115
(2)	Ref. No	10090 30000
(3)	CAS No	0000064-19-7
(4)	Substance name	acetic acid
(5)	Use as additive or polymer production aid (yes/no)	substance is authorized to be used as additive or polymer production aid
(6)	Use as monomer or other starting substance or macromolecule obtained from microbial fermentation (yes/no)	substance is authorized to be used as monomer or other starting substance or macromolecule obtained from microbial fermentation
(7)	FRF applicable (yes/no)	migration results cannot be corrected by the Fat Consumption Reduction Factor (FRF)
(8)	SML [mg/kg]	no entry

Dual Use Additives (Food)

Status: 21st January 2021

"Certain substances used in food contact plastics are, at the same time, authorized food additives or authorized flavorings respectively by Regulation (EC) No 1333/2008 or Regulation (EC) No1334/2008 or their implementing measures. These substances are called dual-use additives.
To decide if a substance can be considered as a dual-use additive, it is sufficient that the chemical identity of the plastic additive matches that of an authorized food additive or flavoring, regardless of its purity or whether or not the substance is subject to a restriction in food and/or in the plastic." [a]

Food Additives
Regulation (EC) No 1333/2008 on food additives
Acetic acid is listed as E-number E 260 in Annex II Union list of food additives approved for use in foods and conditions of use, Part B List of all Additives, 3. Additives other than colors and sweeteners.
Flavorings
Regulation (EC) No 1334/2008 on flavorings and certain food ingredients with flavoring properties for use in and on foods and amending Council Regulation (EEC) No 1601/91, Regulations (EC) No 2232/96 and (EC) No 110/2008 and Directive 2000/13/EC.
The Product is generally listed in Annex I Union List Of Flavorings and Source Materials, PART A Union list of flavoring substances:

(1)	FL No	08.002
(2)	Chemical name	Acetic acid
(3)	CAS No	64-19-7
(4)	JECFA No	81
(5)	CoE No	2
(6)	Purity of the named substance at least 95% unless otherwise specified	
(7)	Restrictions of Use	
(8)	Footnote	
(9)	Reference	JECFA

[a] Quote from "Union Guidelines on Regulation (EU) No 10/2011 on plastic materials and articles intended to come into contact with food"(published by the European Commission Health And Consumers Directorate-General, 21.02.2014)
http://ec.europa.eu/food/food/chemicalsafety/foodcontact/docs/10-2011_plastic_guidance_en.pdf

Packaging Inks in Swiss Ordinance of the FDHA on Materials and Articles (817.023.21)

Status: 21st January 2021

Packaging inks are regulated in the section 12 of the Ordinance of the FDHA on Materials and Articles, and the provisions of this Section apply to packaging inks as specific constituent elements of materials and articles.
General listings in Annex 2 and Annex 10 to the Swiss Ordinance of the FDHA on Materials and Articles (817.023.21):

Annex 2

1	Stoff-Nr..	33
2	Bezeichnung des Stoffes	Acetic acid
3	CAS-Nr.	0000064-19-7
4	Verpackungsmaterial-Referenz-Nr. der Europaischen Kommission fur den Stoff	10090 30000
5	Verwendung als Monomer oder als anderer Ausgangsstoff oder als durch mikrobielle Fermentation gewonnenes Makromolekul	M
6	Verwendung als Zusatzstoff oder als Hilfsstoff bei der Herstellung von Kunststoffen	A
7	FRF anwendbar	
8	SML [mg/kg]	
9	SML(T): Gruppenbeschränkungs-Nr	
10	Beschränkungen und Spezifikationen	
11	Hinweise zur Konformitätsprüfung	

Annex 10

1	Nr.	33

2	Bezeichnung des Stoffes	Acetic acid
3	CAS-Nr.	0000064-19-7
4	Ref-Nr.	10090 30000
5	Verwendung	M, AD
6	Teil	A
7	SML [mg/kg]	

Volatile Organic Compounds (VOC)

Status: 21st January 2021

The Product fulfills the criteria and is considered a VOC according to

- 2010/75/EU on industrial emissions (integrated pollution prevention and control) (Recast)
- 2004/42/CE on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products (Paints Directive)
- Swiss OVOC, Ordinance on the Incentive Tax on Volatile Organic Compounds 814.018

Attachment I: Sales Specifications

Acetic Acid Food Grade E 260, 99/100 %

Celanese
The chemistry inside innovation™

Acetic Acid Food Grade E 260, 99/100 %

CAS-No. 64-19-7

Sales Specification

Specifications [1]		Limit	Unit
Acetic Acid	min.	99.8	wt. %
Freezing Point	min.	16.23	°C
Water	max.	0.2	wt. %
Color	max.	5	Pt-Co
Formic Acid	max.	100	ppm
Acetaldehyde	max.	50	ppm
Iron	max.	0.5	ppm
Heavy Metals as Lead	max.	1.0	ppm
Lead	max.	0.2	ppm
Arsen, Mercury (each)	max.	0.5	ppm
Total Sulfur	max.	1.0	ppm
Total Chlorine	max.	1.0	ppm
Permanganate Time / Oxidizable Impurities	min.	2	hours
Density at 20 °C	-	1.049 – 1.051	g/cm^3
Evaporation Residue	max.	20	ppm
Appearance	-	CFSM [2]	-

(1) Test methods available upon request.
(2) Clear and Free from Suspended Matter.

The product meets the requirements of European Community Regulation (EC) 178/2002, Regulation 231/2012/EC (E260, Acetic Acid), Regulation 852/2004/EC (HACCP-based) and Food Chemicals Codex 14th ed. The product meets the purity requirements of European Pharmacopoeia (Ph. Eur.) 11th ed.

Product Numbers: 5000989
Spec. HACFG-012-EMEA-Jun25
Supersedes: AceticAcidFood100_50000989_SLS_e_V11 of June 1, 2020 (Version-No. 11)

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Acetic Acid Food Grade E 260, 80 %

Celanese
The chemistry inside innovation™

Acetic Acid Food Grade E 260, 80 %

CAS-No. 64-19-7

Sales Specification

Specifications (1)		Limit	Unit
Acetic Acid		79.5 – 80.5	wt. %
Color	max.	5	Pt-Co
Permanganate Time / Oxidizable Impurities	min.	2	hours
Density at 20 °C (2)	-	1.069 – 1.071	g/cm³
Appearance	-	CFSM (3)	-

(1) Test methods available upon request.
(2) Product conforms to limit, but test is not routinely performed.
(3) Clear and Free from Suspended Matter.

Acetic Acid Food Grade E 260, 80 %, is produced by dilution of Acetic Acid Food Grade E 260, 99/100 %, with demineralized drinking water. Further inspection characteristics can be derived from the Celanese Sales Specification for Acetic Acid Food Grade E 260, 99/100 %.

The product meets the requirements of European Community Regulation (EC) 178/2002, Regulation 231/2012/EC (E260, Acetic Acid)[1], Regulation 852/2004/EC (HACCP-based) and Food Chemicals Codex 14th ed.[1]

Product Numbers: 50000990

Spec. HACFG80-008-EMEA-Jun25

Supersedes: AceticAcidFood80_50000990_SLS_e_V7 of June 1, 2020(Version-No. 7)

[1] All requirements are met except for the Acetic Acid content due to the intended dilution with demineralized drinking water.

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