

Safety data sheet
 according to EC-Regulations 1907/2006 (REACH), 1272/2008 (CLP)
 & 2020/878

Printing date 05.12.2023

Version number 2.0 (replaces version 1.3)

Revision: 05.12.2023

SECTION 1: Identification of the substance/mixture and of the company/undertaking

· **1.1 Product identifier**

· **Product Name:** AG091702

· **Product Code:**

Developmental code: POAL51

JTI code: JT40124658

· **GPS No.** 14772925

· **UFI:** 3V5P-TMFD-1Q38-AC7T

· **1.2 Relevant identified uses of the substance or mixture and uses advised against**

Concentrate used in the formulation of tobacco flavouring (including Exposure Scenario for Industrial formulation and (re)packing of Ethanol, and its mixtures).

· **Uses advised against** Anything other than the above.

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

FUJI FLAVOR CO, LTD

3-5-8 Midorigaoka Hamura

Tokyo 205-8503 Japan

Tel: +81 42 554 1244

Fax: +81 42 579 2101

· **Only Representative**

JT International Germany GmbH

A member of the JTI Group of Companies

Diedenhofenerstrasse 20-30

54294 Trier

Germany

Tel: 0049 (0)651 686 1164

E-Mail (competent person): SDSrequest@jti.com

· **Further information obtainable from:** Manufacturer / Supplier

· **1.4 Emergency telephone number:**

Emergency phone no. +81 42 554 1244

Japan, JST (+9 GMT)

Language spoken: Japanese

· **European National Helpdesk** Guidance is available at: <https://echa.europa.eu/support/helpdesks>

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Flam. Liq. 3

H226 Flammable liquid and vapour.



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

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Hazard pictograms

GHS02 GHS09

Signal word Warning**Hazard-determining components of labelling (contains):** Not applicable.**Hazard statements**

H226 Flammable liquid and vapour.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P240 Ground and bond container and receiving equipment.

P241 Use explosion-proof [electrical/ventilating/lighting] equipment.

P280 Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

P403+P235 Store in a well-ventilated place. Keep cool.

2.3 Other hazards**Results of PBT and vPvB assessment****PBT:** Not applicable.**vPvB:** Not applicable.**Determination of endocrine-disrupting properties**

The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures**Description:** Mixture of substances listed below with nonhazardous additions.**Dangerous components:**

CAS: 49553-76-6 EINECS: 256-367-4	Glycerol fatty acid ester Aquatic Chronic 2, H411	80-<90%
CAS: 64-17-5 EINECS: 200-578-6 Reg.nr.: 01-2119457610-43-xxxx	Ethanol Flam. Liq. 2, H225; Eye Irrit. 2, H319 Specific concentration limit: Eye Irrit. 2; H319: C ≥ 50 %	10-<25%

Additional information: For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures**General information:** Immediately remove any clothing soiled by the product.**After inhalation:** Supply fresh air; consult doctor in case of complaints.**After skin contact:** Immediately rinse with water.**After eye contact:** Rinse opened eye for several minutes under running water.

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- **After swallowing:** *If symptoms persist consult doctor.*
- **4.2 Most important symptoms and effects, both acute and delayed** *No further relevant information available.*
- **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:**
CO₂, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **5.2 Special hazards arising from the substance or mixture** *No further relevant information available.*
- **5.3 Advice for firefighters**
- **Protective equipment:** *No special measures required.*

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**
*Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.*
- **6.3 Methods and material for containment and cleaning up:**
*Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Dispose contaminated material as waste according to section 13.
Ensure adequate ventilation.*
- **6.4 Reference to other sections**
*See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.*

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** *No special precautions are necessary if used correctly.*
- **Information about fire - and explosion protection:**
*Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.*
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** *No special requirements.*
- **Information about storage in one common storage facility:** *Not required.*
- **Further information about storage conditions:** *Keep container tightly sealed.*
- **7.3 Specific end use(s)** *Concentrate used in the formulation of flavourings for tobacco products*

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SECTION 8: Exposure controls/personal protection

· 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

CAS: 64-17-5 Ethanol

AGW (Germany)	Long-term value: 380 mg/m ³ , 200 ppm 4(II);DFG, Y
WEL (Great Britain)	Long-term value: 1920 mg/m ³ , 1000 ppm

· DNELs

CAS: 64-17-5 Ethanol

Dermal	Worker - Long-term - Systemic effects	343 mg/kg bw/day
Inhalative	Worker - Long-term - Systemic effects	950 mg/m ³
	Worker - Acute - Local effects	1,900 mg/m ³

· PNECs

CAS: 64-17-5 Ethanol

Intermittent release	2.75 mg/l
Marine water	0.79 mg/l
Freshwater	0.96 mg/l
Freshwater sediment	3.6 mg/kg dw
Soil	0.63 mg/kg dw
Sewage Treatment Plant	580 mg/l

· **Additional information:** The lists valid during the making were used as basis.

· 8.2 Exposure controls

· **Appropriate engineering controls** No further data; see section 7.

· **Individual protection measures, such as personal protective equipment**

· **General protective and hygienic measures:**

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

· **Respiratory protection:**



Not necessary if room is well-ventilated.

· **Hand protection**



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

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· **Eye/face protection**

Tightly sealed goggles

Use eye protection according to EN 166, designed to protect against liquid splashes.

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**· **General Information**

· Physical state	Fluid
· Colour:	Light yellow
· Odour:	Oil note
· Odour threshold:	Not determined.
· Melting point/freezing point:	Not determined.
· Boiling point or initial boiling point and boiling range	Not determined.
· Flammability	Flammable.
· Lower and upper explosion limit	
· Lower:	Not determined.
· Upper:	Not determined.
· Flash point:	24.2 °C (ASTM D 6450)
· Relative self-ignition temperature	Not determined.
· Decomposition temperature:	Not determined.
· pH	4.2 (JIS Z 8802)
· pH (10% Aqua):	Not determined.
· Viscosity:	
· Kinematic viscosity	Not determined.
· Dynamic (20°C):	124.5 mPa.s (JIS Z 8803)
· Dynamic (40°C):	Not determined.
· Solubility	
· water:	<1 g/l (UN GHS rev.6 Annex4 Table A4.3.9.1)
· Partition coefficient n-octanol/water (log value)	Not determined.
· Vapour pressure:	Not determined.
· Density and/or relative density	
· Density (20°C):	0.968 kg/l (JIS K 2249-1)
· Density (40°C):	Not determined.
· Relative density	0.970
· Vapour density	Not determined.

· **9.2 Other information**

· Appearance	
· Form:	Liquid
· Ignition temperature:	Not determined.
· Explosive properties:	Not determined. Components of the mixture do not contain any chemical groups indicating explosive properties.
· Change in condition	Not determined.
· Softening point/range	Not determined.

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· Oxidising properties	Not determined. Components of the mixture do not contain any chemical groups indicating oxidising properties.
· Evaporation rate	Not determined.
· Information with regard to physical hazard classes	
· Explosives	Void
· Flammable gases	Void
· Aerosols	Void
· Oxidising gases	Void
· Gases under pressure	Void
· Flammable liquids	Flammable liquid and vapour.
· Flammable solids	Void
· Self-reactive substances and mixtures	Void
· Pyrophoric liquids	Void
· Pyrophoric solids	Void
· Self-heating substances and mixtures	Void
· Substances and mixtures, which emit flammable gases in contact with water	Void
· Oxidising liquids	Void
· Oxidising solids	Void
· Organic peroxides	Void
· Corrosive to metals	Void
· Desensitised explosives	Void

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values relevant for classification:**

CAS: 49553-76-6 Glycerol fatty acid ester

Oral	LD50	>2,000 mg/kg (rat)
------	------	--------------------

CAS: 64-17-5 Ethanol

Oral	LD50	10,470 mg/kg (rat) (OECD 401)
Inhalative	LC50/4 h	116.9 mg/l /air (rat) Equivalent or similar to OECD TG 403

- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.
- **Serious eye damage/irritation** Based on available data, the classification criteria are not met.
- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

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- **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
- **Carcinogenicity** Based on available data, the classification criteria are not met.
- **Reproductive toxicity** Based on available data, the classification criteria are not met.
- **STOT-single exposure** Based on available data, the classification criteria are not met.
- **STOT-repeated exposure** Based on available data, the classification criteria are not met.
- **Aspiration hazard** Based on available data, the classification criteria are not met.

- **Additional information for single ingredients:**

64-17-5 Ethanol:

Eye Irrit. 2; H319: Causes serious eye irritation. (rabbit, OECD TG 405)

Specific Concentration Limit Eye Irrit. 2; C ≥ 50 %

- **11.2 Information on other hazards**

- **Endocrine disrupting properties**

None of the ingredients is listed.

SECTION 12: Ecological information

- **12.1 Toxicity**

- **Aquatic toxicity:** No further relevant information available.

- **Additional information for single ingredients:**

49553-76-6 Glycerol fatty acid esters:

Aquatic Chronic 2; H411: Toxic to aquatic life with long lasting effects. (Weight of evidence)

- **12.2 Persistence and degradability**

64-17-5 Ethanol: Readily biodegradable (BOD Method).

49553-76-6 Glycerol fatty acid esters: Readily biodegradable (OECD TG 301B).

- **12.3 Bioaccumulative potential**

64-17-5 Ethanol:

The substance has low potential for bioaccumulation. Log Kow = -0.35 (OECD TG 107).

49553-76-6 Glycerol fatty acid esters:

The substance has low potential for bioaccumulation. BCF= 17.03 – 80.9 L/kg ww (QSAR prediction).

- **12.4 Mobility in soil**

The product is predicted to have moderate mobility in soil.

Solubility (Water) <1 g/l

64-17-5 Ethanol:

The substance is predicted to be highly mobile in soil. Log Kow = -0.35 (OECD TG 107).

49553-76-6 Glycerol fatty acid esters:

The substance is predicted to be moderately to slightly mobile in soil. Log Koc = 2.98 - 3.4.

- **Surface tension:** 30.36 mN/m

- **12.5 Results of PBT and vPvB assessment**

- **PBT:**

64-17-5 Ethanol: Not a PBT according to REACH Annex XIII.

49553-76-6 Glycerol fatty acid esters: Not a PBT according to REACH Annex XIII.

- **vPvB:** Not applicable.

- **12.6 Endocrine disrupting properties**

The product does not contain substances with endocrine disrupting properties.

- **12.7 Other adverse effects**

- **Remark:** Toxic for fish

- **Additional ecological information:**

- **General notes:**

Water hazard class 2 (German Regulation) (Self-assessment): hazardous for water

Do not allow product to reach ground water, water course or sewage system.

Danger to drinking water if even small quantities leak into the ground.

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Also poisonous for fish and plankton in water bodies.
 Toxic for aquatic organisms

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **European waste catalogue**

HP3	Flammable
HP14	Ecotoxic

· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

· **14.1 UN number or ID number**

· **ADR, IMDG, IATA**

UN1197

· **14.2 UN proper shipping name**

· **ADR**

1197 EXTRACTS, LIQUID, ENVIRONMENTALLY HAZARDOUS

· **IMDG**

EXTRACTS, LIQUID, MARINE POLLUTANT

· **IATA**

Extracts, liquid

· **14.3 Transport hazard class(es)**

· **ADR, IMDG**



· **Class**

3 Flammable liquids.

· **Label**

3

· **IATA**



· **Class**

3 Flammable liquids.

· **Label**

3

· **14.4 Packing group**

· **ADR, IMDG, IATA**

III

· **14.5 Environmental hazards:**

· **Marine pollutant:**

Symbol (fish and tree)

· **Special marking (ADR):**

Symbol (fish and tree)

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· 14.6 Special precautions for user	Warning: Flammable liquids.
· Hazard identification number (Kemler code):	30
· EMS Number:	F-E,S-D
· Stowage Category	A
· 14.7 Maritime transport in bulk according to IMO instruments	Not applicable.
· Transport/Additional information:	
· ADR	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· Transport category	3
· Tunnel restriction code	D/E
· IMDG	
· Limited quantities (LQ)	5L
· Excepted quantities (EQ)	Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml
· UN "Model Regulation":	UN 1197 EXTRACTS, LIQUID, 3, III, ENVIRONMENTALLY HAZARDOUS

SECTION 15: Regulatory information

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**

· **Directive 2012/18/EU**

· **Named dangerous substances - ANNEX I** None of the ingredients is listed.

· **Seveso category**

E2 Hazardous to the Aquatic Environment

P5c FLAMMABLE LIQUIDS

· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 200 t

· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 500 t

· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

· **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

· **REGULATION (EU) 2019/1148**

· **Annex I - RESTRICTED EXPLOSIVES PRECURSORS (Upper limit value for the purpose of licensing under Article 5(3))**

None of the ingredients is listed.

· **Annex II - REPORTABLE EXPLOSIVES PRECURSORS**

None of the ingredients is listed.

· **National regulations:**

· **Waterhazard class:** Germany: Water hazard class 2 (Self-assessment): hazardous for water.

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15.2 Chemical safety assessment:

This safety data sheet contains an ES in an integrated form. Contents of the exposure scenario have been included into sections 1.2, 8, 9, 12, 15 and 16 of this safety data sheet. - for Ethanol (CAS No. 64-17-5).

SECTION 16: Other information

Relevant phrases

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H411 Toxic to aquatic life with long lasting effects.

Training hints

Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

Classification according to Regulation (EC) No 1272/2008

Flammable liquids	On basis of test data
Hazardous to the aquatic environment - long-term (chronic) aquatic hazard	The classification of the mixture is generally based on the calculation method using substance data according to Regulation (EC) No 1272/2008.

Date of previous version: 28.09.2023

Version number of previous version: 1.3

Abbreviations and acronyms:

ADR: Accord relatif au transport international des marchandises dangereuses par route (European Agreement Concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Flam. Liq. 2: Flammable liquids – Category 2

Flam. Liq. 3: Flammable liquids – Category 3

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard – Category 2

Sources

EU Classification: This Safety Data Sheet was prepared in accordance with EC-Regulation 1907/2006 (REACH), 1272/2008 (CLP) & 2020/878.

Disclaimer

The information contained in this document is believed to be accurate as of the date issued, and is given in good faith to provide advice about the safe handling of the product specified herein. It is the responsibility of the Users to determine whether the product is suitable for their own particular purpose, and to determine the best precautions for the safe handling and use of this product necessary for the User's unique application.

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Annex to the extended Safety Data Sheet (eSDS)

A separate Exposure Scenario has not been provided with this safety data sheet. This safety data sheet contains an ES in an integrated form. Contents

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of the exposure scenario have been included into sections 1.2, 8, 9, 12, 15 and 16 of this safety data sheet. - for Ethanol (CAS No. 64-17-5). For more details regarding the Chemical Safety Report or Exposure Scenarios for: Ethanol, please contact: reach.communication@jti.com

· *** Data compared to the previous version altered.**

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