

# Safety data sheet

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BASF Safety data sheet according to Regulation (EC) No. 1907/2006 as amended from time to time.

Date / Revised: 27.10.2016

Version: 5.2

Product: **Geranyl Acetate 60**

(ID no. 30333479/SDS\_GEN\_EU/EN)

Date of print 28.10.2016

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

### 1.1. Product identifier

## Geranyl Acetate 60

Chemical name: Reaction mass of geranyl acetate and neryl acetate and citronellyl acetate

REACH registration number: 01-2119973483-29-0000

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: Chemical, Chemical for detergents, Cosmetic and oral care chemical, flavoring substance

Recommended use: Chemical, flavoring substance, Chemical for detergents, Cosmetic and oral care chemical

For the detailed identified uses of the product see appendix of the safety data sheet.

### 1.3. Details of the supplier of the safety data sheet

Company:

BASF SE

67056 Ludwigshafen

GERMANY

Operating Division Nutrition and Health

Telephone: +49 621 60-48434

E-mail address: EN-global-safety-data@basf.com

### 1.4. Emergency telephone number

International emergency number:

Telephone: +49 180 2273-112

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## SECTION 2: Hazards Identification

### 2.1. Classification of the substance or mixture

According to Regulation (EC) No 1272/2008 [CLP]

Skin Corr./Irrit. 2  
Skin Sens. 1  
Aquatic Chronic 3

H315, H317, H412

For the classifications not written out in full in this section the full text can be found in section 16.

### 2.2. Label elements

Globally Harmonized System, EU (GHS)

Pictogram:



Signal Word:  
Warning

Hazard Statement:

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P280	Wear protective gloves.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P273	Avoid release to the environment.
P272	Contaminated work clothing should not be allowed out of the workplace.
P264	Wash with plenty of water and soap thoroughly after handling.

Precautionary Statements (Response):

P333 + P311	If skin irritation or rash occurs: Call a POISON CENTER or doctor/physician.
P303 + P352	IF ON SKIN (or hair): Wash with plenty of soap and water.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.

Precautionary Statements (Disposal):

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P501 Dispose of contents/container to hazardous or special waste collection point.

### 2.3. Other hazards

According to Regulation (EC) No 1272/2008 [CLP]

If applicable information is provided in this section on other hazards which do not result in classification but which may contribute to the overall hazards of the substance or mixture.

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## SECTION 3: Composition/Information on Ingredients

### 3.1. Substances

#### Chemical nature

Reaction mass of Geranyl acetate, Neryl acetate, Citronellyl acetate

Geranyl acetate

CAS Number: 105-87-3

EC-Number: 203-341-5

Citronellyl acetate

CAS Number: 150-84-5

EC-Number: 205-775-0

Neryl acetate

CAS Number: 141-12-8

EC-Number: 205-459-2

For the classifications not written out in full in this section, including the hazard classes and the hazard statements, the full text is listed in section 16.

### 3.2. Mixtures

Not applicable

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## SECTION 4: First-Aid Measures

### 4.1. Description of first aid measures

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

On skin contact:  
Wash thoroughly with soap and water.

On contact with eyes:  
Wash affected eyes for at least 15 minutes under running water with eyelids held open. Seek medical attention.

On ingestion:  
Rinse mouth immediately and then drink plenty of water, seek medical attention.

#### **4.2. Most important symptoms and effects, both acute and delayed**

Symptoms: The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

#### **4.3. Indication of any immediate medical attention and special treatment needed**

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

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### **SECTION 5: Fire-Fighting Measures**

#### **5.1. Extinguishing media**

Suitable extinguishing media:  
water spray, foam, dry powder, carbon dioxide

#### **5.2. Special hazards arising from the substance or mixture**

Burning produces harmful and toxic fumes.

#### **5.3. Advice for fire-fighters**

Special protective equipment:  
Wear a self-contained breathing apparatus.

Further information:  
Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.  
Cool endangered containers with water-spray.

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### **SECTION 6: Accidental Release Measures**

#### **6.1. Personal precautions, protective equipment and emergency procedures**

Ensure adequate ventilation. Do not breathe vapour/spray. Avoid contact with skin and eyes.  
Information regarding personal protective measures see, section 8.

#### **6.2. Environmental precautions**

Do not discharge into drains/surface waters/groundwater.

#### **6.3. Methods and material for containment and cleaning up**

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For large amounts: Dike spillage. Pump off product. Dispose of contaminated material as prescribed.  
For residues: Contain with absorbent material (e.g. sand, silica gel, acid binder, general purpose binder, sawdust). Dispose of absorbed material in accordance with regulations.

#### **6.4. Reference to other sections**

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

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## **SECTION 7: Handling and Storage**

### **7.1. Precautions for safe handling**

Ensure thorough ventilation of stores and work areas. Wear suitable protective clothing and eye/face protection. Avoid contact with the skin, eyes and clothing. Keep container tightly sealed.

Protection against fire and explosion:

Prevent electrostatic charge - sources of ignition should be kept well clear - fire extinguishers should be kept handy.

### **7.2. Conditions for safe storage, including any incompatibilities**

Further information on storage conditions: Keep container tightly closed in a cool, well-ventilated place. Protect contents from the effects of light. Keep under inert gas.

### **7.3. Specific end use(s)**

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

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## **SECTION 8: Exposure Controls/Personal Protection**

### **8.1. Control parameters**

Components with occupational exposure limits

No occupational exposure limits known.

PNEC

freshwater: 0.00372 mg/l

marine water: 0.000372 mg/l

intermittent release: 0.0372 mg/l

STP: 8 mg/l

sediment (freshwater): 0.442 mg/kg

sediment (marine water): 0.0442 mg/kg

soil: 0.0859 mg/kg

oral (secondary poisoning):  
No PNEC value available.

#### DNEL

worker:

Long-term exposure- systemic effects, Inhalation: 62.59 mg/m<sup>3</sup>

worker:

Long-term exposure- systemic effects, dermal: 35.5 mg/kg

consumer:

Long-term exposure- systemic effects, Inhalation: 15.4 mg/m<sup>3</sup>

consumer:

Long-term exposure- systemic effects, dermal: 17.75 mg/kg

consumer:

Long-term exposure- systemic effects, oral: 8.9 mg/kg

## **8.2. Exposure controls**

### Personal protective equipment

Respiratory protection:

Breathing protection if gases/vapours are formed. Gas filter for gases/vapours of organic compounds (boiling point >65 °C, e. g. EN 14387 Type A)

Hand protection:

Suitable chemical resistant safety gloves (EN 374) also with prolonged, direct contact (Recommended: Protective index 6, corresponding > 480 minutes of permeation time according to EN 374): E.g. nitrile rubber (0.4 mm), chloroprene rubber (0.5 mm), butyl rubber (0.7 mm) etc. Supplementary note: The specifications are based on tests, literature data and information of glove manufacturers or are derived from similar substances by analogy. Due to many conditions (e.g. temperature) it must be considered, that the practical usage of a chemical-protective glove in practice may be much shorter than the permeation time determined through testing.

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

### General safety and hygiene measures

Handle in accordance with good industrial hygiene and safety practice. Hands and/or face should be washed before breaks and at the end of the shift.

Environmental exposure controls

For information regarding environmental exposure controls, see Section 6.

**SECTION 9: Physical and Chemical Properties****9.1. Information on basic physical and chemical properties**

Form:	liquid	
Colour:	No data available.	
Odour:	fruity, flowery	
Odour threshold:	not determined	
pH value:	No data available.	
Melting point:	< -100 °C	
Boiling point:	244 °C (1,013.25 hPa)	(measured)
	The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.	
Flash point:	114 °C	(Directive 92/69/EEC, A.9, closed cup)
Evaporation rate:	not determined	
Flammability:	not flammable	
Lower explosion limit:	0.8 %(V) (95 °C)	
Upper explosion limit:	4.0 %(V) (138 °C)	
Ignition temperature:	252 °C	(DIN EN 14522)
	The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.	
Vapour pressure:	0.013 hPa (20 °C)	(OECD Guideline 104)
	The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.	
Density:	0.915 g/cm <sup>3</sup> (20 °C, 1,013 hPa)	
	The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.	
Relative vapour density (air):	not determined	

Solubility in water:	The product has not been tested. The statement has been derived from substances/products of a similar structure or composition. 29 mg/l (20 °C, pH 6.4 - 6.7)	(OECD Guideline 105)
Solubility (qualitative) solvent(s):	organic solvents readily soluble	
Partitioning coefficient n-octanol/water (log Kow):	4.04	(OECD Guideline 117)
Self ignition:	Based on its structural properties the product is not classified as self-igniting.	Test type: Spontaneous self-ignition at room-temperature.
Viscosity, dynamic:	2.78 mPa.s (23 °C) 1.92 mPa.s (40 °C)	
Viscosity, kinematic:	2.71 mm <sup>2</sup> /s (20 °C) The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.	(OECD 114)
Explosion hazard:	Based on the chemical structure there is no indicating of explosive properties.	
Fire promoting properties:	Based on its structural properties the product is not classified as oxidizing.	

## 9.2. Other information

Self heating ability:	It is not a substance capable of spontaneous heating.	
pKA:	Study scientifically not justified.	
Adsorption/water - soil:	KOC: 1151; log KOC: 3.06	(calculated)
Volatility/water - air:		(calculated)
Surface tension:	Based on chemical structure, surface activity is not to be expected.	
Grain size distribution:	The substance / product is marketed or used in a non solid or granular form.	



## SECTION 10: Stability and Reactivity

### 10.1. Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals: Corrosive effects to metal are not anticipated.

Formation of flammable gases: Remarks: Forms no flammable gases in the presence of water.

### 10.2. Chemical stability

The product is stable if stored and handled as prescribed/indicated.

### 10.3. Possibility of hazardous reactions

No hazardous reactions if stored and handled as prescribed/indicated.

### 10.4. Conditions to avoid

Avoid extreme temperatures. See MSDS section 7 - Handling and storage.

### 10.5. Incompatible materials

Substances to avoid:  
peroxides

### 10.6. Hazardous decomposition products

No hazardous decomposition products if stored and handled as prescribed/indicated.

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## SECTION 11: Toxicological Information

### 11.1. Information on toxicological effects

#### Acute toxicity

Assessment of acute toxicity:

Virtually nontoxic after a single ingestion. Virtually nontoxic after a single skin contact. The product has not been tested. The statement has been derived from the properties of the individual components.

Experimental/calculated data:

LD50 rat (oral): 6,330 mg/kg

LD50 rat (oral): > 5 mL/kg

LD50 rabbit (dermal): > 5,460 mg/kg

The statements are based on the properties of the individual components.

#### Irritation

Assessment of irritating effects:

Skin contact causes irritation. Not irritating to the eyes. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Experimental/calculated data:

Skin corrosion/irritation rabbit: Irritant. (Draize test)

Skin corrosion/irritation rabbit: Irritant. (OECD Guideline 404)

Serious eye damage/irritation rabbit: non-irritant (OECD Guideline 405)

Respiratory/Skin sensitizationAssessment of sensitization:

May cause sensitization by skin contact. The product has not been tested. The statement has been derived from the properties of the individual components.

Experimental/calculated data:

mouse: skin sensitizing (OECD Guideline 429)

Germ cell mutagenicityAssessment of mutagenicity:

In the majority of tests performed (bacteria/microorganisms/cell cultures) a mutagenic effect was not found. A mutagenic effect was also not observed in in-vivo assays. The product has not been tested. The statement has been derived from the properties of the individual components.

CarcinogenicityAssessment of carcinogenicity:

In long-term studies in rats and mice in which the substance was given by gavage, a carcinogenic effect was not observed. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Reproductive toxicityAssessment of reproduction toxicity:

The results of animal studies gave no indication of a fertility impairing effect. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Developmental toxicityAssessment of teratogenicity:

In animal studies the substance did not cause malformations. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

Specific target organ toxicity (single exposure)

Assessment of STOT single:

Based on available Data, the classification criteria are not met.

#### Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

No substance-specific organotoxicity was observed after repeated administration to animals. The product has not been tested. The statement has been derived from substances/products of a similar structure or composition.

#### Aspiration hazard

No data available.

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## **SECTION 12: Ecological Information**

### **12.1. Toxicity**

Assessment of aquatic toxicity:

Acutely toxic for aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

Toxicity to fish:

LC50 (96 h) 68.12 mg/l, *Leuciscus idus* (DIN 38412 Part 15, static)

The details of the toxic effect relate to the nominal concentration. The product has not been tested.

The statement has been derived from substances/products of a similar structure or composition.

Aquatic invertebrates:

EC50 (48 h) 14.1 mg/l, *Daphnia magna* (Directive 92/69/EEC, C.2, static)

The statement of the toxic effect relates to the analytically determined concentration.

Aquatic plants:

EC50 (72 h) 3.72 mg/l (growth rate), *Desmodesmus subspicatus* (OECD Guideline 201, static)

The statement of the toxic effect relates to the analytically determined concentration.

No observed effect concentration (72 h) 0.585 mg/l (growth rate), *Desmodesmus subspicatus* (OECD Guideline 201, static)

The statement of the toxic effect relates to the analytically determined concentration.

Microorganisms/Effect on activated sludge:

EC20 (30 min) approx. 800 mg/l, activated sludge, domestic (DIN EN ISO 8192, static)

The details of the toxic effect relate to the nominal concentration.

Chronic toxicity to fish:

No data available.

Chronic toxicity to aquatic invertebrates:

No data available.

Assessment of terrestrial toxicity:  
No data available concerning terrestrial toxicity.

## 12.2. Persistence and degradability

Assessment biodegradation and elimination (H<sub>2</sub>O):  
Readily biodegradable (according to OECD criteria).

Elimination information:  
> 70 % BOD of the ThOD (28 d) (other) (aerobic, activated sludge, domestic, non-adapted)

Assessment of stability in water:  
In contact with water the substance will hydrolyse slowly.  
Information on Stability in Water (Hydrolysis):  
 $t_{1/2}$  1,539 h (25 °C, pH value 7), (OECD Guideline 111)

## 12.3. Bioaccumulative potential

Assessment bioaccumulation potential:  
No significant accumulation in organisms is expected as a result of the distribution coefficient of n-octanol/water (log Pow).

## 12.4. Mobility in soil

Assessment transport between environmental compartments:  
Volatility: The substance will rapidly evaporate into the atmosphere from the water surface.  
Adsorption in soil: Adsorption to solid soil phase is expected.

## 12.5. Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not contain a substance fulfilling the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria. Self classification

## 12.6. Other adverse effects

The substance is not listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

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## SECTION 13: Disposal Considerations

### 13.1. Waste treatment methods

Observe national and local legal requirements.

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## SECTION 14: Transport Information

### Land transport

#### ADR

	Not classified as a dangerous good under transport regulations
UN number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

#### RID

	Not classified as a dangerous good under transport regulations
UN number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

### Inland waterway transport

#### ADN

	Not classified as a dangerous good under transport regulations
UN number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user:	None known

#### Transport in inland waterway vessel

Not evaluated

### Sea transport

#### IMDG

	Not classified as a dangerous good under transport regulations
UN number:	Not applicable
UN proper shipping name:	Not applicable

Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

**Air transport**

## IATA/ICAO

	Not classified as a dangerous good under transport regulations
UN number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

**14.1. UN number**

See corresponding entries for "UN number" for the respective regulations in the tables above.

**14.2. UN proper shipping name**

See corresponding entries for "UN proper shipping name" for the respective regulations in the tables above.

**14.3. Transport hazard class(es)**

See corresponding entries for "Transport hazard class(es)" for the respective regulations in the tables above.

**14.4. Packing group**

See corresponding entries for "Packing group" for the respective regulations in the tables above.

**14.5. Environmental hazards**

See corresponding entries for "Environmental hazards" for the respective regulations in the tables above.

**14.6. Special precautions for user**

See corresponding entries for "Special precautions for user" for the respective regulations in the tables above.

**14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code**

Regulation:	Not evaluated
Shipment approved:	Not evaluated
Pollution name:	Not evaluated
Pollution category:	Not evaluated
Ship Type:	Not evaluated

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## SECTION 15: Regulatory Information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### Prohibitions, Restrictions and Authorizations

Annex XVII of Regulation (EC) No 1907/2006: Number on List: 3

If other regulatory information applies that is not already provided elsewhere in this safety data sheet, then it is described in this subsection.

### 15.2. Chemical Safety Assessment

Chemical Safety Assessment performed

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## SECTION 16: Other Information

Any other intended applications should be discussed with the manufacturer. Corresponding occupational protection measurements must be followed.

Full text of the classifications, including the hazard classes and the hazard statements, if mentioned in section 2 or 3:

Skin Corr./Irrit.	Skin corrosion/irritation
Skin Sens.	Skin sensitization
Aquatic Chronic	Hazardous to the aquatic environment - chronic
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H412	Harmful to aquatic life with long lasting effects.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

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