Page 1/8

1 Identification

- · Product identifier
- · Product Name: Geranyl Acetate
- · Part Number: S-7605
- · Application of the substance / the mixture Certified Reference Material
- Details of the supplier of the safety data sheet
 Manufacturer/Supplier:
 SPEX CertiPrep, LLC.
 203 Norcross Ave, Metuchen,
 NJ 08840 USA
- Information department: product safety department • Emergency telephone number: Emergency Phone Number (24 hours) CHEMTREC (800-424-9300) Outside US: 703-527-3887

2 Hazard(s) identification

· Classification of the substance or mixture



Flam. Liq. 2 H225 Highly flammable liquid and vapor.



GHS06 Skull and crossbones

Acute Tox. 3 H331 Toxic if inhaled.



GHS08 Health hazard

STOT SE 1 H370 Causes damage to organs.

- · Label elements
- GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).
- · Hazard pictograms



JПS02 ОП

· Signal word Danger

- · Hazard-determining components of labeling:
- methanol • Hazard statements
- H225 Highly flammable liquid and vapor.
- H331 Toxic if inhaled.

H370 Causes damage to organs.

· Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

Use explosion-proof electrical/ventilating/lighting/equipment.

Do not breathe dust/fume/gas/mist/vapors/spray.

If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Store locked up.

Dispose of contents/container in accordance with local/regional/national/international regulations.

· Classification system:





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Product Name: Geranyl Acetate

· HMIS-ratings (scale 0 - 4)

HEALTH	*3	Health = *3
FIRE	3	Fire = 3
REACTIVITY	0	Reactivity = 0

· Other hazards

- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.

3 Composition/information on ingredients

- · Chemical characterization: Mixtures
- · Description: Mixture of the substances listed below with nonhazardous additions.
- · Dangerous components:
- 67-56-1 methanol
- · Chemical identification of the substance/preparation

105-87-3 Geranyl Acetate

4 First-aid measures

- · Description of first aid measures
- · General information:
- Immediately remove any clothing soiled by the product.
- Remove breathing apparatus only after contaminated clothing have been completely removed.
- In case of irregular breathing or respiratory arrest provide artificial respiration.
- After inhalation:
- Supply fresh air or oxygen; call for doctor.
- In case of unconsciousness place patient stably in side position for transportation.
- · After skin contact: Immediately wash with water and soap and rinse thoroughly.
- *After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.*
- · After swallowing: Do not induce vomiting; immediately call for medical help.
- · Information for Doctor:
- Most important symptoms and effects, both acute and delayed No further relevant information available.
- Indication of any immediate medical attention and special treatment needed No further relevant information available.

5 Fire-fighting measures

- · Extinguishing media
- · Suitable extinguishing agents: CO2, sand, extinguishing powder. Do not use water.
- · For safety reasons unsuitable extinguishing agents: Water with full jet
- · Special hazards arising from the substance or mixture No further relevant information available.
- · Advice for firefighters
- · Protective equipment: Mouth respiratory protective device.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Wear protective equipment. Keep unprotected persons away.
- · 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.
- Do not allow to enter sewers/ surface or ground water.
- 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 item 13. Ensure adequate ventilation. Do not flush with water or aqueous cleansing agents
 Reference to other sections
- Rejerence 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.

(Contd. on page 3)

US

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(Contd. of page 1)

99.9%

0.1%

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Product Name: Geranyl Acetate

· Protective Action Criteria for Chemicals	(Contd. of page 2)
• PAC-1:	
67-56-1 methanol	530 ppm
• PAC-2:	
67-56-1 methanol	2,100 ppm
• PAC-3:	
67-56-1 methanol	7200* ppm

7 Handling and storage

· Handling:

- \cdot Precautions for safe handling
- Ensure good ventilation/exhaustion at the workplace. Open and handle receptacle with care.
- Prevent formation of aerosols.
- Information about protection against explosions and fires: Keep ignition sources away - Do not smoke.
- Protect against electrostatic charges.

Keep respiratory protective device available.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: Store in a cool location.
- $\cdot \textit{Information about storage in one common storage facility: } Not required.$
- Further information about storage conditions: Keep receptacle tightly sealed. Store in cool, dry conditions in well sealed receptacles.
- Specific end use(s) No further relevant information available.

8 Exposure controls/personal protection

• Additional information about design of technical systems: No further data; see item 7.

· Control parameters

• Components with limit values that require monitoring at the workplace: 67-56-1 methanol PEL Long-term value: 260 mg/m³, 200 ppm REL Short-term value: 325 mg/m³, 250 ppm Long-term value: 260 mg/m³, 200 ppm
PEL Long-term value: 260 mg/m³, 200 ppm REL Short-term value: 325 mg/m³, 250 ppm
REL Short-term value: 325 mg/m ³ , 250 ppm
Skin
TLV Short-term value: 328 mg/m ³ , 250 ppm Long-term value: 262 mg/m ³ , 200 ppm Skin; BEI
· Ingredients with biological limit values:
67-56-1 methanol
BEI 15 mg/L Medium: urine Time: end of shift Parameter: Methanol (background, nonspecific)
• Additional information: The lists that were valid during the creation were used as basis.
 Exposure controls Personal protective equipment: General protective and hygienic measures: Keep away from foodstuffs, beverages and feed. Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Store protective clothing separately. Avoid contact with the eyes and skin. Breathing equipment: In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that independent of circulating air.

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Safety Data Sheet acc. to OSHA HCS

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Product Name: Geranyl Acetate

· Protection of hands:



Protective gloves

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

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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.



Tightly sealed goggles

9 Physical and chemical properties

· Information on basic physical and c	chemical properties	
· General Information		
· Appearance:		
Form:	Liquid	
Color:	According to product specification	
• Odor:	Characteristic	
· Odour Threshold:	Not applicable.	
· pH-value:	Not applicable.	
· Change in condition		
Melting point/Melting range:	Undetermined.	
Boiling point/Boiling range:	64 °C (147 °F)	
· Flash point:	11 °C (52 °F)	
· Flammability (solid, gaseous):	Not applicable.	
· Ignition temperature:	455 °C (851 °F)	
• Decomposition temperature:	Not applicable.	
• Auto igniting:	Product is not selfigniting.	
• Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.	
· Explosion limits:		
Lower:	5.5 Vol %	
Upper:	44.0 Vol %	
· Vapor pressure at 20 °C (68 °F):	128 hPa (96 mm Hg)	
· Density	Not applicable.	
· Relative density	Not applicable.	
· Vapor density	Not applicable.	
· Evaporation rate	Not applicable.	
· Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
· Partition coefficient (n-octanol/wate	er): Not applicable.	
· Viscosity:		
Dynamic:	Not applicable.	
Kinematic:	Not applicable.	
· Solvent content:		
Organic solvents:	99.9 %	
VOC content:	99.9 %	
Solids content:	0.1 %	
	(Contd. or	n page 5)

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Product Name: Geranyl Acetate

• Other information

No further relevant information available.

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10 Stability and reactivity

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

11 Toxicological information

- · Information on toxicological effects
- · Acute toxicity:
- · LD/LC50 values that are relevant for classification:
- 67-56-1 methanol
- Oral LD50 5628 mg/kg (rat)
- Dermal LD50 15800 mg/kg (rabbit)
- · Primary irritant effect:
- on the skin: No irritant effect.
- · on the eye: No irritating effect.
- · Sensitization: No sensitizing effects known.
- · Additional toxicological information:
- The product shows the following dangers according to internally approved calculation methods for preparations: Toxic
- · Carcinogenic categories

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

None of the ingredients is listed.

12 Ecological information

- · Toxicity
- Aquatic toxicity: No further relevant information available.
- · Persistence and degradability No further relevant information available.
- · Behavior in environmental systems:
- · Bioaccumulative potential No further relevant information available.
- · Mobility in soil No further relevant information available.
- · Additional ecological information:
- · General notes:
- Water hazard class 1 (Self-assessment): slightly hazardous for water
- Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

- · Waste treatment methods
- Recommendation: Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

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Product Name: Geranyl Acetate

• Uncleaned packagings: • Recommendation: Disposal must be made according to official regulations.

DOT Mechanol ABR 1230 Mechanol 1200 (Kanol ADD, IATA METHANOL Carse a Second Second Label 3.6.1 ADR Class 3.6.1 ADR Class 3.6.1 Class 3.6.1 C	Transport information	
ADK 120 Methanol METHANOL Tansport hazard class(s) DOT Class 3 Fummable liquids Label 3. 6.1 ADR Class 3 Fummable liquids Label 3+6.1 MDG Class 3+6.1 MDG Class 3+6.1 MDG Class 3+6.1 MDG Class 4+6.1 MDG Class 4+6.1 MDG MDG MDG MDG MDG MDG MDG MDG	UN-Number DOT, ADR, IMDG, IATA	UN1230
Class 3 Flammable liquids Label 3.6.1 ADR 3 Flammable liquids Image: Class 3 Flammable liquids Label 3-6.1 IMDG 3-6.1 IMDG 3/6.1	DOT ADR	1230 Methanol
View 3 Class 3 Lobel 3.6.1 ADR 3.6.1 View 3 View 3 Class 3 Lobel 3 State 3 View 3 <t< td=""><td>Transport hazard class(es)</td><td></td></t<>	Transport hazard class(es)	
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Label 3+6.1 IMDG	ADR	
IMDG View Second predictional information: Class 3 Flammable liquids Jabel 36.1 IATA Second predictional information: View Second predictional information: Class 3 Flammable liquids Jabel 3 (6.1) Packing group 3 (6.1) Packing group Job DOT, ADR, IMDG, IATA II Environmental hazards: Not applicable. Special precautions for user Warning: Flammable liquids Danger code (Kemler): 336 EMS Number: F-E,S-D Stowage Code SV2 Clear of living quarters. Transport in bulk according to Annex II of MARPOL7378 and the IBC Not applicable. Transport in bulk according to Annex II of MARPOL7378 and the IBC Not applicable. Transport Additional information: Not applicable.		3+6.1
Label 3/6.1 IATA Image: Constant of the second		
Class 3 Flammable liquids Label 3 (6.1) Packing group 3 (6.1) Packing group II Environmental hazards: Not applicable. Special precautions for user Warning: Flammable liquids Danger code (Kemler): 336 EMS Number: F-E,S-D Stowage Category B Stowage Code SW2 Clear of living quarters. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Not applicable. Transport/Additional information: Not applicable. ADR Excepted quantities (EQ) Code: E2		
DOT, ADR, IMDG, IATAIIEnvironmental hazards:Not applicable.Special precautions for userWarning: Flammable liquidsDanger code (Kemler):336EMS Number:F-E, S-DStowage CategoryBStowage CodeSW2 Clear of living quarters.Transport in bulk according to Annex II of MARPOL73/78 and the IBC CodeNot applicable.Transport/Additional information:ADRExcepted quantities (EQ)Code: E2	Class	
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Code Not applicable. Transport/Additional information: ADR Excepted quantities (EQ) Code: E2	Danger code (Kemler): EMS Number: Stowage Category	336 F-E,S-D B
ADR Excepted quantities (EQ) Code: E2		'8 and the IBC Not applicable.
Excepted quantities (EQ) Code: E2	Transport/Additional information:	
Maximum net quantity per outer packaging: 500 ml		Maximum net quantity per inner packaging: 30 ml

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Reviewed on 04/12/2017

Product Name:	Geranyl Acetate
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(Contd. of page 6)

· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
· UN "Model Regulation":	UN 1230 METHANOL, 3 (6.1), II

15 Regulatory information

· Safety, health and environmenta	l regulations/legislation spec	ific for the substance or mixture
. Sara		

· Sara
· Section 355 (extremely hazardous substances):
None of the ingredients is listed.
· Section 313 (Specific toxic chemical listings):
67-56-1 methanol
· TSCA (Toxic Substances Control Act):
All ingredients are listed.
· Proposition 65
· Chemicals known to cause cancer:
None of the ingredients is listed.
· Chemicals known to cause reproductive toxicity for females:
None of the ingredients is listed.
· Chemicals known to cause reproductive toxicity for males:
None of the ingredients is listed.
· Chemicals known to cause developmental toxicity:
67-56-1 methanol
· Carcinogenic categories
· EPA (Environmental Protection Agency)
None of the ingredients is listed.
· TLV (Threshold Limit Value established by ACGIH)
None of the ingredients is listed.
· NIOSH-Ca (National Institute for Occupational Safety and Health)
None of the ingredients is listed.
• GHS label elements The product is classified and labeled according to the Globally Harmonized System (GHS).

· Hazard pictograms



· Signal word Danger

- · Hazard-determining components of labeling:
- methanol
- Hazard statements
- H225 Highly flammable liquid and vapor. H331 Toxic if inhaled.
- H370 Causes damage to organs.
- · Precautionary statements
- Keep away from heat/sparks/open flames/hot surfaces. No smoking.
- Use explosion-proof electrical/ventilating/lighting/equipment.
- Do not breathe dust/fume/gas/mist/vapors/spray.
- If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. Store locked up.
- Dispose of contents/container in accordance with local/regional/national/international regulations.
- · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

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Product Name: Geranyl Acetate

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This information is based on our p establish a legally valid contractual	resent knowledge. However, this shall not constitute a guarantee for any specific product features and shall not relationship.
Department issuing SDS: product so	ifety department
Contact:	
SPEX CertiPrep, LLC.	
1	
1-732-549-7144	
Date of preparation / last revision 0	4/12/2017 / -
Abbreviations and acronyms:	
	handises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangere	
DOT: US Department of Transportation	
IATA: International Air Transport Association	
ACGIH: American Conference of Governmental	
EINECS: European Inventory of Existing Comme	
ELINCS: European List of Notified Chemical Sul	
CAS: Chemical Abstracts Service (division of the	
NFPA: National Fire Protection Association (US.	
HMIS: Hazardous Materials Identification System	1 (USA)
VOC: Volatile Organic Compounds (USA, EU)	
LC50: Lethal concentration, 50 percent	
LD50: Lethal dose, 50 percent PBT: Persistent, Bioaccumulative and Toxic	
<i>vPvB: very Persistent and very Bioaccumulative</i>	
NIOSH: National Institute for Occupational Safe	
OSHA: Occupational Safety & Health	y
TLV: Threshold Limit Value	
PEL: Permissible Exposure Limit	
REL: Recommended Exposure Limit	
BEI: Biological Exposure Limit	
Flam. Liq. 2: Flammable liquids – Category 2	
Acute Tox. 3: Acute toxicity – Category 3	
STOT SE 1: Specific target organ toxicity (single	exposure) – Category 1