Printing date 12/16/2016

Reviewed on 12/16/2016

1 Identification

- · Product identifier
- · Trade name: GOLDWELL STYLESIGN PERFECT HOLD Powerful Hair Lacquer
- · Article number: 227534 300ml / 227536 500ml / 227566 100ml / 227634 50ml
- · Application of the substance / the mixture Hair Cosmetics
- · Manufacturer/Supplier:

Kao USA Inc.

2535 Spring Grove Avenue Cincinnati, Ohio 45214 / USA KaoGermanySDS @kao.com

- · Information department: CHEMTREC
- Emergency telephone number: CHEMTREC (US): (0800) 424-9300

CHEMTREC (Outside US): +1 (703) 527-3887 (24h)

2 Hazard(s) identification

· Classification of the substance or mixture

Flam. Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurized container: May burst if

heated.

STOT SE 3 H336 May cause drowsiness or dizziness.

Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.

- · Label elements
- Hazard pictograms







GHS02 GHS07 GHS08

- · Signal word Danger
- · Hazard-determining components of labeling:

pentane

· Hazard statements

H222-H229 Extremely flammable aerosol. Pressurized container: May burst if heated.

H336 May cause drowsiness or dizziness.

H304 May be fatal if swallowed and enters airways.

· Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.

P251 Do not pierce or burn, even after use.

P211 Do not spray on an open flame or other ignition source.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray
P271 Use only outdoors or in a well-ventilated area.

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P312 Call a POISON CENTER/doctor if you feel unwell.

P331 Do NOT induce vomiting.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P501 Dispose of contents/container in accordance with local/regional/national/international

regulations.

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- · Classification system:
- · NFPA ratings (scale 0 4)



Health = 0 Fire = 4Reactivity = 3

· HMIS-ratings (scale 0 - 4)



Health = 0 Fire = 4 Reactivity = 3

- · 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 co	mponents:	
CAS: 64-17-5	ethanol	25-50%
	♦ Flam. Liq. 2, H225	
CAS: 75-37-6	1,1-difluoroethane	25-50%
	🔷 Press. Gas, H280	
CAS: 109-66-0		10-25%
	♠ Flam. Liq. 2, H225♠ Asp. Tox. 1, H304♦ STOT SE 3, H336	
	♦ Asp. Tox. 1, H304	
CAS: 124-68-5	2-amino-2-methylpropanol	<i>0.1-</i> <u><</u> 2.5%
	♦ Skin Irrit. 2, H315; Eye Irrit. 2A, H319	

4 First-aid measures

- · Description of first aid measures
- · After inhalation: Supply fresh air; consult doctor in case of complaints.
- · After skin contact: Generally the product does not irritate the skin.
- · After eye contact: Rinse opened eye for several minutes under running water.
- · After swallowing: If symptoms persist consult doctor.
- · Information for doctor: Treat symptomatically.
- · 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, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

· Special hazards arising from the substance or mixture No further relevant information available.

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· Advice for firefighters

· Protective equipment: No special measures required.

6 Accidental release measures

· Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

- · Environmental precautions: Do not allow to enter sewers/ surface or ground water.
- Methods and material for containment and cleaning up:

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

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.

7 Handling and storage

- · Handling:
- · Precautions for safe handling Ensure good ventilation/exhaustion at the workplace.
- · Information about protection against explosions and fires:

Do not spray on a naked flame or any incandescent material.

Keep ignition sources away - Do not smoke.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric lights. Do not pierce or burn, even after use.

- · Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles:

Observe official regulations on storing packagings with pressurized containers.

- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions: Keep receptacle tightly sealed.
- · 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:

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit.

At this time, the other constituents have no known exposure limits.

Atui	is time, the other constituents have no known exposure limits.
CAS	: 64-17-5 ethanol (25-50%)
PEL	Long-term value: 1900 mg/m³, 1000 ppm
REL	Long-term value: 1900 mg/m³, 1000 ppm
TLV	Short-term value: 1880 mg/m³, 1000 ppm
CAS	: 109-66-0 pentane (10-25%)
PEL	Long-term value: 2950 mg/m³, 1000 ppm

PEL Long-term value: 2950 mg/m³, 1000 ppm

REL Long-term value: 350 mg/m³, 120 ppm Ceiling limit value: 1800* mg/m³, 610* ppm

*15-min

TLV Long-term value: 2950 mg/m³, 1000 ppm

· Additional information: The lists that were valid during the creation were used as basis.

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- · Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures: Wash hands before breaks and at the end of work.
- 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 is independent of circulating air.

Protection of hands:



Not required under normal conditions. The details concerned are recommendations. 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 mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. - Please contact the glove supplier for futher information.

· 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.

· Eye protection:



Not required under normal conditions If there is a risk of splashing: safety glasses

9 Physical and chemical properties

· Information on basic physical and o	chemical properties
· General Information · Appearance:	
Form:	Aerosol
Color:	According to product specification
· Odor:	Characteristic
· Odor threshold:	Not determined.
· pH-value:	Not determined.
· Change in condition	
Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	Not applicable, as aerosol.
· Flash point:	16 °C (61 °F)
· Flammability (solid, gaseous):	Not applicable.
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Product is not explosive. However, formation of explosive air/vapor mixtures are possible.
· Vapor pressure at 20 °C (68 °F):	5100 hPa (3825 mm Hg)
· Density at 20 °C (68 °F):	0.8615 g/cm³ (7.189 lbs/gal)
Relative density	Not determined.
· Vapor density	Not determined.

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		(Contd. of page 4
Evaporation rate	Not applicable.	
Solubility in / Miscibility with		
Water:	Not miscible or difficult to mix.	
Partition coefficient (n-octano	I/water): Not determined.	
Viscosity:		
Dynamic:	Not determined.	
Kinematic:	Not determined.	
Solvent content:		
Organic solvents:	54.52 %	
Water:	6.5 %	
VOC content:	54.52 %	
Solids content:	6.0 %	
Other information	No further relevant information available.	

10 Stability and reactivity

- · Reactivity No dangerous reactions known if used as directed.
- · Chemical stability The product is stable under standard conditions.
- 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:
- 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:

· Carcinogenic categories

· IARC (International Agency for Research on Cancer)		
CAS: 64-17-5 ethanol	1	
CAS: 67-63-0 isopropyl alcohol	3	
· 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.

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- · 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 2 (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.

- · Results of PBT and vPvB assessment
- · PBT: Not applicable.
- · vPvB: Not applicable.
- · Other adverse effects No further relevant information available.

13 Disposal considerations

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

UN-Number		
DOT, IMDG, IATA	UN1950	
UN proper shipping name		
DOT	Aerosols, flammable	
IMDG	AEROSOLS	
IATA	AEROSOLS, flammable	
Transport hazard class(es)		
DOT		
TAMARIC CAS.	0.4	
Class	2.1	
Label	2.1	
IMDG, IATA		
Class	2.1	
Label	2.1	
Packing group DOT, IMDG, IATA	-	
Environmental hazards:	Not applicable.	
Special precautions for user	Warning: Gases	
Danger code (Kemler):	-	
EMS Number:	F-D,S-U	

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(Contd. of page 6) · Stowage Code SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters. SG69 For AEROSOLS with a maximum capacity of 1 · Segregation Code litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2. · Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable. · Transport/Additional information: · DOT · Quantity limitations On passenger aircraft/rail: 75 kg On cargo aircraft only: 150 kg · IMDG · Limited quantities (LQ) 1L · Excepted quantities (EQ) Code: E0 Not permitted as Excepted Quantity

15 Regulatory information

· UN "Model Regulation":

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

UN 1950 AEROSOLS, 2.1

- · Sara
- · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

Section 313 (Specific toxic chemical listings):

CAS: 67-63-0 isopropyl alcohol

· 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:

CAS: 64-17-5 ethanol

· Carcinogenic categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

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(Contd. of page 7) · TLV (Threshold Limit Value established by ACGIH) CAS: 64-17-5 ethanol *A*3 CAS: 67-63-0 isopropyl alcohol A4 · NIOSH-Ca (National Institute for Occupational Safety and Health) None of the ingredients is listed. · Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

H225 Highly flammable liquid and vapor.

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

- · Department issuing SDS: Regulatory Affairs
- · Date of preparation / last revision 12/16/2016 / -
- · Abbreviations and acronvms:

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

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)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

VOC: Volatile Organic Compounds (USA, EU) PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Flam. Aerosol 1: Aerosols – Category 1

Press. Gas: Gases under pressure - Liquefied gas

Flam. Liq. 2: Flammable liquids - Category 2

Skin Irrit. 2: Skin corrosion/irritation - Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation - Category 2A

STOT SE 3: Specific target organ toxicity (single exposure) - Category 3

Asp. Tox. 1: Aspiration hazard – Category 1

* Data compared to the previous version altered.