Printing date 10/12/2016

Reviewed on 10/12/2016

1 Identification

- · Product identifier
- · Trade name: KMS HAIRPLAY MAKEOVER SPRAY
- · Article number: 137091 250ML / 137090 75ML
- · 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): (800)424-9300

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

2 Hazard(s) identification

· Classification of the substance or mixture

STOT SE 3 H336 May cause drowsiness or dizziness.

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

· Label elements

This product is defined as cosmetic. Therefore, this product is exempted from requirements of the hazard communication standard, 29 CFR1910.1200

· Hazard pictograms





GHS07 GHS08

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

H336 May cause drowsiness or dizziness.

H304 May be fatal if swallowed and enters airways.

Precautionary statements

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.

P405 Store locked up.

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.

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



Health = 0 Fire = 4 Reactivity = 1

(Contd. on page 2)

(Contd. of page 1)

Safety Data Sheet acc. to OSHA HCS

Printing date 10/12/2016

Reviewed on 10/12/2016

Trade name: KMS HAIRPLAY MAKEOVER SPRAY

· HMIS-ratings (scale 0 - 4)

HEALTH 0 Health = 0
FIRE 4 Fire = 4
REACTIVITY 1 Reactivity = 1

- · 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:			
CAS: 109-66-0	pentane	 Flam. Liq. 2, H225 Asp. Tox. 1, H304 STOT SE 3, H336 	25-50%
CAS: 75-37-6	1,1-difluoroethane	🔷 Press. Gas, H280	25-50%
CAS: 64-17-5	ethanol	🚸 Flam. Liq. 2, H225	2.5-<10%

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.

- · Advice for firefighters
- · Protective equipment: No special measures required.

6 Accidental release measures

- · Personal precautions, protective equipment and emergency procedures Not required.
- · 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.

(Contd. on page 3)

Printing date 10/12/2016 Reviewed on 10/12/2016

Trade name: KMS HAIRPLAY MAKEOVER SPRAY

(Contd. of page 2)

· 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.

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 remaining constituent has no known exposure limits.

CAS	CAS: 109-66-0 pentane (25-50%)	
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	
CAS	CAS: 64-17-5 ethanol (2.5-<10%)	

		•	-	
PEL	Long-term value:	1900	mg/m³,	1000 ppm
REL	Long-term value:	1900	mg/m³,	1000 ppm
TLV	Short-term value:	1880	ma/m^3 .	1000 ppm

CAS: 9005-25-8 Starch (2.5-<10%)

PEL	Long-term value: 15* 5** mg/m³ *total dust **respirable fraction
	*total dust **respirable fraction
REL	Long-term value: 10* 5** mg/m³
	Long-term value: 10* 5** mg/m³ *total dust **respirable fraction
TLV	Long-term value: 10 mg/m³

- · 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.

Wash hands before breaks and at the end of work.

(Contd. on page 4)

Printing date 10/12/2016 Reviewed on 10/12/2016

Trade name: KMS HAIRPLAY MAKEOVER SPRAY

· Breathing equipment:

(Contd. of page 3)

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 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: Boiling point/Boiling range: 	Undetermined. Not applicable, as aerosol.	
· Flash point:	Not applicable, as aerosol.	
· Flammability (solid, gaseous):	Not applicable.	
· Decomposition temperature:	Not determined.	
· Auto igniting:	Product is not selfigniting.	
· Danger of explosion:	Product does not present an explosion hazard.	
· Vapor pressure at 20 °C (68 °F):	5100 hPa (3825 mm Hg)	
· Density at 20 °C (68 °F):	0.795 g/cm³ (6.634 lbs/gal)	
Relative density	Not determined.	
Vapor density	Not determined.	
· Evaporation rate	Not applicable.	
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix.	

(Contd. on page 5)

Printing date 10/12/2016 Reviewed on 10/12/2016

Trade name: KMS HAIRPLAY MAKEOVER SPRAY

(Contd. of page 4) · Partition coefficient (n-octanol/water): Not determined. · Viscosity: Dynamic: Not determined. Kinematic: Not determined. · Solvent content: Organic solvents: 55.0 % VOC content: 55.0 % 437.4 g/l / 3.65 lb/gl Solids content: 4.0 % · 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 (Internation	onal Agency for Research on Cancer)	
CAS: 64-17-5	ethanol	1
CAS: 5989-27-5	(R)-p-mentha-1,8-diene	3
· NTP (National T	oxicology Program)	
None of the ingre	edients is listed.	
· OSHA-Ca (Occu	ıpational Safety & Health Administration)	
None of the ingre	edients 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.

(Contd. on page 6)

(Contd. of page 5)

Safety Data Sheet acc. to OSHA HCS

Reviewed on 10/12/2016 Printing date 10/12/2016

Trade name: KMS HAIRPLAY MAKEOVER SPRAY

· 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

- · Waste treatment methods
- · Recommendation:

· Label

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

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

UN-Number DOT, IMDG, IATA	UN1950
UN proper shipping name DOT IMDG IATA	Aerosols, flammable AEROSOLS AEROSOLS, flammable
Transport hazard class(es) DOT	
Class Label	2.1 2.1
IMDG	
Class Label	2.1 2.1
IATA	
Class	2.1

2.1

(Contd. on page 7)

Printing date 10/12/2016 Reviewed on 10/12/2016

Trade name: KMS HAIRPLAY MAKEOVER SPRAY

	(Contd. of page
· Packing group · DOT, IMDG, IATA	-
Environmental hazards:	Product contains environmentally hazardou substances: (R)-p-mentha-1,8-diene, pentane
· Marine pollutant:	Symbol (fish and tree)
Special precautions for user Danger code (Kemler): EMS Number: Stowage Code Segregation Code	Warning: Gases F-D,S-U SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 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 litre: Segregation as for class 9. Stow "separate from" class 1 except for division 1.4. For AEROSOL with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WAST AEROSOLS: Segregation as for the appropriate subdivision of class 2.
· Transport in bulk according to Annex MARPOL73/78 and the IBC Code	II of Not applicable.
· Transport/Additional information:	
· DOT · Quantity limitations	On passenger aircraft/rail: 75 kg On cargo aircraft only: 150 kg
· IMDG · Limited quantities (LQ) · Excepted quantities (EQ)	1L Code: E0 Not permitted as Excepted Quantity
	UN 1950 AEROSOLS, 2.1

15 Regulatory information

- · Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Sara
- · Section 355 (extremely hazardous substances):

None of the ingredients is listed.

· Section 313 (Specific toxic chemical listings):

None of the ingredients is listed.

· 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.

(Contd. on page 8)

Printing date 10/12/2016 Reviewed on 10/12/2016

Trade name: KMS HAIRPLAY MAKEOVER SPRAY

(Contd. of page 7) · 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. · TLV (Threshold Limit Value established by ACGIH) CAS: 64-17-5 ethanol *A*3 CAS: 9005-25-8 Starch 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.

H336 May cause drowsiness or dizziness.

- · Department issuing SDS: Regulatory Affairs
- · Contact: CHEMTREC: (+1 703 527-3887 (24h)
- · Date of preparation / last revision 10/12/2016 / -
- Abbreviations and acronyms:

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, ÉU)

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

Press. Gas: Gases under pressure – Liquefied gas

Flam. Liq. 2: Flammable liquids - Category 2

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.