Printing date 09/30/2016

Reviewed on 09/30/2016

1 Identification

· Product identifier

· Trade name: KMS Hair Play Dry Wax

· Article number: 137069 - 75ml / 137070 - 150ml

· 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

The product is not classified according to the Globally Harmonized System (GHS).

- · Label elements
- · Hazard pictograms Void
- · Signal word Void
- · Hazard statements Void
- · Classification system:
- · NFPA ratings (scale 0 4)



· HMIS-ratings (scale 0 - 4)



- · 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: 115-10-6	dimethyl ether	♦ Flam. Gas 1, H220 Press. Gas, H280	25-50%
CAS: 75-37-6	1,1-difluoroethane	♦ Press. Gas, H280	10-30%
CAS: 64-17-5	ethanol	♦ Flam. Liq. 2, H225	10-30%
CAS: 67-63-0	isopropyl alcohol	Flam. Liq. 2, H225Eye Irrit. 2A, H319; STOT SE 3, H336	2.5-<10%

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4 First-aid measures

- · Description of first aid measures
- · General information: No special measures required.
- · 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:

Absorb liquid components with liquid-binding material.

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 No special measures required.
- · 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: None.
- · Specific end use(s) No further relevant information available.

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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.

-		unie, uie remaining conciliaem nache une mi expecure immer
	CAS:	115-10-6 dimethyl ether (25-50%)
	WEEL	Long-term value: 1000 ppm
	CAS:	64-17-5 ethanol (10-30%)
	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: 67-63-0 isopropyl alcohol (2.5-<10%)	
	PEL	Long-term value: 980 mg/m³, 400 ppm
	REL	Short-term value: 1225 mg/m³, 500 ppm Long-term value: 980 mg/m³, 400 ppm
	TLV	Short-term value: 984 mg/m³, 400 ppm Long-term value: 492 mg/m³, 200 ppm BEI
Glycerin (2.5-<10%)		rin (2.5-<10%)
	PEL	Long-term value: 15* 5** mg/m³ mist; *total dust **respirable fraction
	TLV	TLV withdrawn-insufficient data human occup. exp.
Ĭ	· Ingredients with biological limit values:	
Ī	CAS: 67-63-0 isopropyl alcohol (2.5-<10%)	
	BEI 4	<u> </u>
	M	ledium: urine
	T	ima: and of shift at and of workwaak

Time: end of shift at end of workweek

Parameter: Acetone (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:

The usual precautionary measures for handling chemicals should be followed.

- · Breathing equipment: Not required.
- 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.

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· Eye protection:

(Contd. of page 3)



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

Information on basic physical and denoted and denoted information	chemical properties
Appearance:	
Form:	Liquid
Color:	Colorless
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:	21 °C (70 °F)
Flammability (solid, gaseous):	Not applicable.
Ignition temperature:	
Decomposition temperature:	Not determined.
Auto igniting:	Product is not selfigniting.
Danger of explosion:	Product does not present an explosion hazard.
Explosion limits:	
Lower:	Not determined.
Upper:	Not determined.
Vapor pressure at 20 °C (68 °F):	5200 hPa (3900 mm Hg)
Density at 20 °C (68 °F):	0.9565 g/cm³ (7.982 lbs/gal)
Relative density	Not determined.
Vapor density	Not determined.
Evaporation rate	Not applicable.
Solubility in / Miscibility with	A Company of the Comp
Water:	Not miscible or difficult to mix.
Partition coefficient (n-octanol/water	er): Not determined.
Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
Solvent content:	
Organic solvents:	59.1 %
Water:	11.6 %
VOC content:	54.4 %
Solids content:	14.5 %
Other information	No further relevant information available.

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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 is not subject to classification according to internally approved calculation methods for preparations:

When used and handled according to specifications, the product does not have any harmful effects according to our experience and the information provided to us.

· Carcinogenic categories

	3		
· IARC (Internati	onal Agency for Research on Cancer)		
CAS: 64-17-5	ethanol	1	
CAS: 67-63-0	isopropyl alcohol	3	
CAS: 5989-27-5	(R)-p-mentha-1,8-diene	3	
· NTP (National)	· NTP (National Toxicology Program)		
None of the ingr	redients is listed.		
· OSHA-Ca (Occ	upational Safety & Health Administration)		
None of the ingr	redients 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.

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13 Disposal considerations

- · Waste treatment methods
- · Recommendation: Smaller quantities can be disposed of with household waste.
- Uncleaned packagings:
- Recommendation: Disposal must be made according to official regulations.

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14 Irane	nort in	formation
IT HUIS		Officiation

· UN-Number · DOT, IMDG, IATA	UN1950
· UN proper shipping name	
· DOT	Aerosols, flammable
· IMDG	AEROSOLS
· IATA	AEROSOLS, flammable

- · Transport hazard class(es)
- · DOT



· 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

· 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.

• Segregation Code SG69 For AEROSOLS with a maximum capacity of 1

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.

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• 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)

Not permitted as Excepted Quantity

• UN "Model Regulation":

UN 1950 AEROSOLS, 2.1

15 Regulatory information

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

· Sara		
· Section 355 (extremely hazardous substances):		
None of the ingredients is listed.		
· Section 313 (Specific toxic chemical listings):		
CAS: 67-63-0 iso	propyl alcohol	
· TSCA (Toxic Substances Control Act):		
CAS: 115-10-6	dimethyl ether	
CAS: 75-37-6	1,1-difluoroethane	
CAS: 64-17-5	ethanol	
CAS: 67-63-0	isopropyl alcohol	

CAS: 25086-89-9 Poly(1-vinylpyrrolidone-co-vinyl acetate)
Glycerin
Polyoxyethylene (XX) Hydrogenated Castor Oil
CAS: 9005-25-8 Starch
Propylene Glycol
CAS: 50-70-4 D-glucitol
CAS: 5989-27-5 (R)-p-mentha-1,8-diene

Water / Aqua / Eau

· 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.

· TLV (Threshold Limit Value established by ACGIH)

CAS: 64-17-5 ethanol

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Safety Data Sheet acc. to OSHA HCS

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(Contd. of page 7) CAS: 67-63-0 isopropyl alcohol A4 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

H220 Extremely flammable gas.

H225 Highly flammable liquid and vapor.

H280 Contains gas under pressure; may explode if heated.

H319 Causes serious eve irritation.

H336 May cause drowsiness or dizziness.

- · Department issuing SDS: Regulatory Affairs
- · Date of preparation / last revision 09/30/2016 / -
- · 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

BEI: Biological Exposure Limit

Flam. Gas 1: Flammable gases - Category 1

Press. Gas: Gases under pressure - Compressed gas

Press. Gas: Gases under pressure - Liquefied gas

Flam. Liq. 2: Flammable liquids - Category 2

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

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

· * Data compared to the previous version altered.