

Safety Data Sheet

acc. to OSHA HCS

Printing date 04/18/2018

Reviewed on 04/18/2018

1 Identification

- **Product identifier**
- **Trade name:** *KMS Style Color_Spray-on Color, for all cans , 150 ml (US)*
- **Article number:**
167020, 167021, 167022, 167023, 167024, 167025, 167026, 167027, 167028, 167032, 167036, 167040
- **Product category** PC39 Cosmetics, personal care products
- **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 Extremely flammable aerosol.
Press. Gas H280 Contains gas under pressure; may explode if heated.
Asp. Tox. 1 H304 May be fatal if swallowed and enters airways.
- **Label elements**
- **Hazard pictograms**

GHS02 GHS04 GHS08
- **Signal word** Danger
- **Hazard-determining components of labeling:**
pentane
- **Hazard statements**
H222 Extremely flammable aerosol.
H280 Contains gas under pressure; may explode if heated.
H304 May be fatal if swallowed and enters airways.
- **Precautionary statements**
P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Pressurized container: Do not pierce or burn, even after use.
P301+P310 If swallowed: Immediately call a poison center/doctor.
P331 Do NOT induce vomiting.
P405 Store locked up.
P410+P403 Protect from sunlight. Store in a well-ventilated place.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
P501 Dispose of contents/container in accordance with local/regional/national/international regulations.
- **Classification system:**
- **NFPA ratings (scale 0 - 4)**

Health = 0
Fire = 0
Reactivity = 3

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· **HMIS-ratings (scale 0 - 4)**

HEALTH	0	Health = 0
FIRE	0	Fire = 0
REACTIVITY	3	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 components:**

CAS: 75-37-6	1,1-difluoroethane	⚠ Press. Gas, H280	30-50%
CAS: 115-10-6	dimethyl ether	⚠ Flam. Gas 1, H220 ⚠ Press. Gas, H280	30-50%
CAS: 64-17-5	ethanol	⚠ Flam. Liq. 2, H225	10-15%
CAS: 109-66-0	pentane	⚠ Flam. Liq. 2, H225 ⚠ Asp. Tox. 1, H304 ⚠ STOT SE 3, H336	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:**
Water spray, water fog, Dry chemical, Alcohol-resistant foam, Carbon dioxide (CO2)
- **Special hazards arising from the substance or mixture**
Vapors can form a highly flammable mixture with air
There is an overpressure. Fire or strong heat can cause violent rupture of packing.
Hazardous thermal decomposition products:
Hydrogen fluoride; fluorinated ingredients, carbon oxides,
Inhalation of decomposition products can cause health damage.
- **Advice for firefighters**
- **Protective equipment:**
In case of fire, wear self-contained breathing equipment. Use personal protective equipment. Wear neoprene gloves during cleaning up work after a fire.
- **Additional information**
Cool containers/ tanks with water spray. Allow to burn until the outflow can be stopped.

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Highly flammable. Vapours are heavier than air and may spread along floors. Vapours or gases may travel considerable distances to ignition source and flash back.

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** No special precautions are necessary if used correctly.
- **Information about protection against explosions and fires:**
Keep ignition sources away - Do not smoke.
- **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. Keep container in a well-ventilated place.
- **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.

CAS: 115-10-6 dimethyl ether (30-50%)	
WEEL	Long-term value: 1000 ppm
CAS: 109-66-0 pentane (10%)	
PEL	Long-term value: 2950 mg/m ³ , 1000 ppm
REL	Long-term value: 350 mg/m ³ , 120 ppm Ceiling limit value: 1800* mg/m ³ , 610* ppm *15-min
TLV	Long-term value: 2950 mg/m ³ , 1000 ppm
CAS: 12001-26-2 Mica (≥0.1-≤2.5%)	
PEL	Long-term value: 20 mppcf ppm <1% crystalline silica

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REL	Long-term value: 3* mg/m ³ *respirable dust; containing < 1% quartz
TLV	Long-term value: 3* mg/m ³ *as respirable fraction

- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment:**
- **General protective and hygienic measures:** Wash hands before breaks and at the end of work.
- **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 further 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:	Various colors
Odor:	Characteristic
Odor threshold:	Not determined.

- **pH-value at 20 °C (68 °F):** 5.1

- **Change in condition**

Melting point/Melting range:	Undetermined.
Boiling point/Boiling range:	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:** Not determined.

- **Vapor pressure:** Not determined.

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· Density at 20 °C (68 °F):	0.8165 g/cm ³ (6.81369 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.
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
Dynamic:	Not determined.
Kinematic:	Not determined.
· Solvent content:	
Organic solvents:	54.0 %
VOC content:	53.98 %
· Solids content:	6.1 %
· Other information	No further relevant information available.

10 Stability and reactivity

- **Reactivity** Extremely flammable gas. Hazardous polymerization does not take place.
- **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** Vapors can form a highly flammable mixture with air.
- **Conditions to avoid** Material is stable. Avoid open flames and high temperatures
- **Incompatible materials:**
Alkali metals, Alkaline earth metals, Powdered metals, powdered metal salts
- **Hazardous decomposition products:**
Decomposition products are hazardous. This material can be decomposed by high temperatures (open flames, glowing metal surfaces, etc.) forming hydrofluoric acid and possibly carbonyl fluoride.

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
CAS: 1309-37-1	diiron trioxide

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· NTP (National Toxicology Program)	
None of the ingredients is listed.	

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· **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 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.

14 Transport information

- | | |
|---------------------------------------|---|
| · UN-Number | |
| · DOT, ADR/RID/ADN, 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 |
| · ADR/RID/ADN | |
| |  |
| · Class | 2 5F Gases |

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· **Label** 2.1

· **IMDG, IATA**



· **Class** 2.1

· **Label** 2.1

· **Packing group**

· **DOT, ADR/RID/ADN, IMDG, IATA** Void

· **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.

· **Segregation Code**

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 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

· **UN "Model Regulation":** 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.

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· **TSCA new (21st Century Act) (Substances not listed)**

CAS: 64-17-5 ethanol

· **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

A3

CAS: 1309-37-1 diiron trioxide

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.

H304 May be fatal if swallowed and enters airways.

H336 May cause drowsiness or dizziness.

· **Department issuing SDS:** Regulatory Affairs

· **Date of preparation / last revision** 04/18/2018 / -

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

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)

NFFPA: 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. Gas 1: Flammable gases – Category 1

Flam. Aerosol 1: Aerosols – Category 1

Press. Gas: Gases under pressure – Compressed gas

Press. Gas: Gases under pressure – Liquefied gas

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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

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· * **Data compared to the previous version altered.**

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