

**SAFETY DATA SHEET (SDS)****KRYSTAL AEROSOL PAINT****SECTION I. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION**

PRODUCT NAME : KRYSTAL AEROSOL PAINT  
 CHEMICAL FAMILY : Mixture of Acrylate Resin  
 CHEMICAL NAME : Mixture of Acrylic Based Lacquer and Propellants  
 CAS NO. : None

MANUFACTURER : Federal Paints Manufacturing (M) Sdn. Bhd.  
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**EMERGENCY CONTACT POINT**

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**SECTION II. HAZARD IDENTIFICATION****CLASS CLASSIFICATION**

Flammable aerosols	: Category 1
Aspiration hazard	: Category 1
Skin corrosion or irritation	: Category 2
Serious eye damage or eye irritation	: Category 2
Reproductive toxicity	: Category 1A
Specific target organ toxicity – single exposure	: Category 3
Specific target organ toxicity – repeated exposure	: Category 2

**CLASS LABEL ELEMENTS****Hazard Symbols****Signal Word**

Danger

**Hazard Statements**

H222	: Extremely flammable aerosol.
H304	: May be fatal if swallowed and enters airways.
H315	: Causes skin irritation.
H319	: Causes serious eye irritation.
H335	: May cause respiratory irritation.
H336	: May cause drowsiness or dizziness.
H360	: May damage fertility or the unborn child.
H373	: May cause damage to organs through prolonged or repeated exposure.

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### Precautionary Statements

P201	: Obtain special instructions before use.
P202	: Do not handle until all safety precautions have been read and understood.
P210	: Keep away from heat/sparks/open flames/hot surface – 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.
P261	: Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	: Wash hands thoroughly after handling.
P271	: Use only outdoors or in a well-ventilated area.
P280	: Wear protective gloves/protective clothing/eye protection/face protection.
P281	: Use personal protective equipment as required.
P312	: Call a POISON CENTER or doctor/physician if you feel unwell.
P314	: Get medical advice/attention if you feel unwell.
P321	: Specific treatment.
P331	: Do NOT induce vomiting.
P362	: Take off contaminated clothing and wash before reuse.
P301+P310	: IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.
P302+P352	: IF ON SKIN: Wash with plenty of soap and water.
P304+P340	: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
P308+P313	: IF exposed or concerned: Get medical advice/attention.
P332+P313	: If skin irritation occurs: Get medical advice/attention.
P337+P313	: If eye irritation persists: Get medical advice/attention.
P305+P351+P338	: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P405	: Store locked up.
P403+P233	: Store in a well-ventilated place. Keep container tightly closed.
P410+P412	: Protect from sunlight. Do not expose to temperature exceeding 50°C / 122°F.
P501	: Dispose of contents/container to (in accordance with local/regional/national/ international regulation)

### Physical and Chemical Hazards

Aerosol containers can explode when heated, due to excessive pressure build-up. When spray on naked flame on any incinerated material the aerosol vapors can ignite.

### SECTION III. COMPOSITION AND INFORMATION ON INGREDIENTS

<u>Material</u>	<u>CAS Number</u>	<u>Concentration ranges, %</u>
Hydrocarbon solvent	-	30 – 60 %
Synthetic resin	-	10 – < 30%
Petroleum gases, liquefied	68476-85-7	30 – 60%

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The liquefied petroleum gas contains the following substances for which exposure limits apply : propane, butane and ethyl mercaptan.

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### SECTION IV. FIRST AID MEASURES

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SKIN CONTACT	: Immediate wash contact area with soap and water. Remove contaminated clothing. Launder contaminated clothing before reuse. If redness, pain and irritation persists after washing, get medical attention.
INHALATION	: Move patient to well-ventilated area with fresh air. If there is breathing difficulties, give artificial respiration / resuscitation. Get immediate medical attention.
EYE CONTACT	: Immediately flush eyes with large amount of water for at least 15 minutes while holding eye lids open. Get medical attention immediately.
INGESTION	: DO NOT induce vomiting. Immediate rinse mouth. Get prompt medical attention.

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### SECTION V. FIRE FIGHTING MEASURES

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#### Specific Hazards

The product is flammable, and heating may generate vapors which may form explosive vapor/air mixture. Aerosol containers can explode when heated, due to excessive pressure build-up.

#### Extinguishing Media :

**Extinguisher Media** : Use foam, dry chemical, carbon dioxide (CO<sub>2</sub>) or water spray / fog.

**Unsuitable Extinguisher Media** : DO not use water in jet or straight stream.

#### Fire Fighting Instructions

Evacuate area. If a leak or spill has not ignited, use water spray to disperse the vapours and to protect personnel attempting to stop the leak. Prevent run-off from fire control or dilution from entering sewers or drinking water supply. Fire fighter should use standard protective equipment and in enclosed spaces, self-contained breathing apparatus (SCBA). Use water spray to cool fire exposed surface and protect personnel.

#### Hazardous Combustion Products

Smoke, fume, carbon monoxide, carbon dioxide, chlorine compounds, hydrocarbon of indeterminate nature (depending on environmental conditions and reactive product present).

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### SECTION VI. ACCIDENTAL RELEASE MEASURES

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#### Personal Precautions, Protective Equipment and Emergency Procedures:

- Stop the leak, if possible. Ventilate the space involved.
- Construct a dike / barrier to prevent spreading.
- Contain spilled liquid with sand and earth. Do not use combustible materials such as saw dust.
- Remove all sources of ignition.
- Avoid contact with spilled or released material; do not walk through the spilled material.

#### Environmental Precautions:

- Prevent run off and contact with waterways, drains or sewers.

#### Methods and materials for containment and cleaning up:

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- Allow residue to evaporate or soak up with an appropriate absorbent (e.g. sand) and dispose of safely.
- Dispose of waste in accordance with local regulation.
- Use appropriate container for disposal of spilled material collected.

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### SECTION VII. HANDLING AND STORAGE

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#### Precautions for safe handling

- Extinguish any naked flames. Do not smoke.
- Avoid spilling, skin and eye contact.
- Provide good ventilation.
- Do not cut, weld or heat the aerosol can.

#### Conditions for safe storage

- Store product in dry, cool and well ventilated place, keep away from naked flame, sunlight, ignition source and other source of heat.
- Keep away from oxidizing and corrosive agent.

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### SECTION VIII. EXPOSURE CONTROL AND PERSONAL PROTECTION

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The American Conference of Government Industrial Hygienists (ACGIH) value is provided on this document for information and reference only.

#### *Occupational Exposure Limit*

Material	Source	Type	ppm
Propane	ACGIH	TWA	1000
	USECHH Malaysia	TWA	2500
Butane	ACGIH	TWA	800
	USECHH Malaysia	TWA	800
Hydrocarbon solvent	ACGIH	TWA	50
	USECHH Malaysia	TWA	50
Ethyl mercaptan	USECHH Malaysia	TWA	0.5

#### *Engineering Controls*

The level of protection and type of control necessary will be vary depending upon potential exposure conditions. Control measures to consider:

- Adequate ventilation should be provided do the exposure limits are not exceeded.
- The use of local exhaust ventilation is recommended to control emissions near the source or working area.

#### *Personal Protective Equipment*

Personal protective equipment selections vary based on potential exposure conditions such as applications, handling practice, concentration and ventilation. Information on the selection of protective equipment for use with this material, as provided below, is based upon intended, normal usage.

Hygiene measures : Always observed good personal hygiene measures such as washing after handling the material and before eating, drinking and/or smoking. Routinely wash personal protective equipment to remove contaminants. Wash contaminated clothing before re-use. Practice good housekeeping.

Respiratory protection : If engineering control do not maintain airborne concentrations to a level which is adequate to protect worker health, an NIOSH approved respirator may be appropriate.

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Hand protection	: Chemical resistance Nitrile glove is recommended.
Eye protection	: Wear safety glasses, goggles or face shield to protect against splashes especially when opening drum lids or covers.
Skin / Body protection	: Where risk of splashing or in spillage clean up, use chemical resistance clothing. Wear antistatic clothing.
Other protective equipment	: Eye bath.
Thermal hazards	: Not applicable.
Environment exposure control	: Do not discharge into drains / surface waters / ground water. Local guideline on emission limits for volatile substances must be observed for the discharge of exhaust air containing vapour.

**STANDARD INDUSTRIAL HYGIENE PROCEDURES SHOULD BE PRACTISE****SECTION IX. PHYSICAL AND CHEMICAL PROPERTIES**

a. Appearance (physical state, color, etc)	: Aerosol, pigmented lacquer
b. Odor	: Hydrocarbon
c. Odor threshold	: Data not available
d. pH	: Not applicable
e. Melting Point / Freezing point	: Data not available
f. Initial boiling point and boiling range	: Data not available
g. Flash point	: < -40°C
h. Evaporation Rate	: Data not available
i. Flammability (solid, gas)	: Yes, the aerosol vapor is flammable.
j. Upper / lower flammable or explosive limits	: 10-15% / 1-2% (Volume in air)
k. Vapor pressure	: Data not available
l. Solubility	: Soluble only in hydrocarbon solvent
m. Vapor density	: Data not available
n. Specific gravity	: 0.80 – 1.00 kg/m <sup>3</sup>
o. Partition coefficient : n-octanol/water	: Data not applicable
p. Auto-ignition temperature	: Data not available
q. Decomposition temperature	: Data not available
r. Viscosity	: 12.0 – 14.0 secs (Ford Cup 4/26°C)

**SECTION X. STABILITY AND REACTIVITY**

a. Reactivity	: No specific reactivity hazards associated with this product.
b. Chemical Stability	: Stable under normal room condition.
c. Possibility of hazardous reaction	: None current known.
d. Conditions to avoid	: Heat, flame, other source of ignition and sunlight.
e. Incompatible materials	: Incompatible with strong oxidizing agents eg. Hypochlorites and peroxides, concentrated acids, halogens or molten sulphur.
f. Hazardous decomposition products	: Carbon monoxide, carbon dioxide, chlorine compounds, hydrocarbon of indeterminate nature ( depending on environmental conditions & reactive products present).

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### SECTION XI. TOXICOLOGICAL INFORMATION

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#### Toxicology information on ingredients

##### **Likely routes of exposure**

Inhalation is the primary route of exposure although absorption may occur through skin contact of following accidental ingestion.

#### a. Acute toxicity

##### Liquefied Petroleum Gas (LPG)

- Oral toxicity : Data not available.  
 Dermal Toxicity : Data not available.  
 Inhalation Toxicity : LC50 < 5mg/l (gas).  
 Eye irritation : Not irritating. Liquid causes cold burn.  
 Skin irritation : Not irritating. Liquid causes cold burn.

##### Hydrocarbon solvent

- Oral toxicity : Low toxicity; LD50 >15000mg/kg  
 Dermal Toxicity : Low toxicity; LD50 >2000mg/kg  
 Inhalation Toxicity : Low toxicity if inhaled.

- b. Skin corrosion / irritation : Frequent and/or prolonged contact may defat the skin and resulting in possible irritation and dermatitis. Skin contact may aggravate an existing dermatitis condition.
- c. Serious eye damage / eye irritation : The vapor mixture may irritate eyes.
- d. Respiratory sensitization : High mixture vapor concentrations may irritate respiratory tract.
- e. Skin sensitization : Not expected to be a sensitizer.
- f. Carcinogenicity : Not expected to be carcinogenic.
- g. Germ cell mutagenicity : Not expected to be mutagenic.
- h. Reproductive toxicity : No data available.
- i. Specific target organ toxicity (STOT) : Inhalation of vapor or mists may cause irritation to the respiratory system.  
 - single exposure
- j. Specific target organ toxicity (STOT) : No data available.  
 - Repeated exposure
- k. Aspiration hazard : Aspiration into the lung when swallowed or vomited may cause chemical pneumonitis which can be fatal.

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### SECTION XII. ECOLOGICAL INFORMATION

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Not available data on the mixture

Adopt good industrial practices, so that the product is not released into the environment.

#### a. Ecotoxicity (aquatic and terrestrial, where available) :

Based on data for a similar substance or estimated data, the product is expected to be toxic to aquatic organism. May cause long term adverse effects in the aquatic environment. Product float on water.

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- b. Persistence and degradability:  
The hydrocarbon solvent in this product is expected to be rapidly and be "readily" biodegradable.
- c. Bio accumulative potential : No data available.
- d.. Mobility in the soil : If product enter soil, one or more constituents will be mobile and may contaminate groundwater.
- e. Other adverse effect : No data available.

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### SECTION XIII. DISPOSAL INFORMATION

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The following advice only applies to the product as supplied; combination with other materials may well indicate another route of disposal. Disposal must be in accordance with applicable law and regulations. Consult disposal expert.

#### Waste treatment methods

##### **a. Material**

##### Recommendation:

Dispose of according to regulations by incineration in a special waste incinerator. Small quantities may be disposed of by incineration in an approved facility. Observe local/state/federal regulations.

This product is not suitable for disposal by either landfill or via municipal sewers, drains, natural streams or rivers.

##### **b. Empty container**

##### Recommendation:

Empty container must not be burned because of explosion hazard.

Empty container should be punctured to ensure remaining of LPG is released and disposal through qualified or licensed contractor. Care should be taken in any case to ensure compliance with EC, national and local regulations.

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### SECTION XIV. TRANSPORTATION INFORMATION

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- a. UN Number : 1950
- b. UN proper shipping name : Aerosol flammable Liquid
- c. Transport hazard classes :
- Rail/Road(RID/ADR) : 2.1
  - Air (ICAO/IATA) : 2.1
  - SEA (IMO / IMDG) : 2.1
- d. Packing group : None
- e. Marine pollutant : Yes
- f. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code: Not available.

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### SECTION XV. REGULATORY INFORMATION

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Governing Directive

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Occupational Safety and Health (Classification, Labeling and Safety Data Sheet of Hazardous Chemicals) Regulations 2013

Malaysia Occupational Safety and Health Act 1994

Malaysia Use and Standard s of Exposure of Chemicals Hazardous to Health Regulation 2000

Globally Harmonized System of Classification and Labelling of Chemicals (GHS)

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### SECTION XVI. OTHER INFORMATION

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The information herein is believed to be accurate based on our state of knowledge at the date of revision and is intended to describe the product for the purpose of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply to all federal, state, provincial or local law.

The information given applies only to our specific product and may not be valid for such material used in combination with other products. It is the user's responsibility to evaluate the suitability of the information for their particular purpose. No warranty is made, either expressed or implied in this safety data sheet. We do not accept liability for any loss or damage resulted from use of this safety date sheet information.

#### Legend

ADR	: European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS	: Chemical Abstracts Service (division of the American Chemical Society).
IATA	: International Air Transport Association.
ICAO	: International Civil Aviation Organization.
IMDG	: International Maritime Code for Dangerous Goods.
LC50	: Lethal concentration, for 50 percent of test population.
LD50	: Lethal dose, for 50 percent of test population.
NIOSH	: National Institute of Occupational Safety and Health Malaysia.
RID	: Goods by rail.
TWA	: Threshold Limit Value for the Time Weighted Average 8 hour day (ACGIH Standard).
USECHH	: Use and Standard of Exposure Chemicals Hazards to Health 2000, Malaysia.