

Automark Technologies (India) Pvt. Ltd.

Material Safety Data Sheet

SECTION 1: IDENTIFICATION OF THE PRODUCT AND MANUFACTURER

PRODUCT NAME : **COLD PLASTIC ROAD MARKING MATERIAL PERMARK 2K**

CHEMICAL FAMILY : **SOLVENT FREE**

MANUFACTURER: AUTOMARK TECHNOLOGIES (INDIA) PVT. LTD., NAGPUR.

AT: 18km, Stone, Bothali Village, Wardha Road, Nagpur
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SECTION 2: HAZARD IDENTIFICATION

Classification of the

substance or mixture:

CLP Regulation (EC)

n° 1272/2008:

Classification of this product has been carried out in accordance with CLP Regulation (EC) n° 1272/2008.

Flam. Liq. 2: Flammable

liquids, Category 2, H225 Skin

Irrit. 2: Skin irritation, Category

2, H315

Skin Sens. 1: Sensitisation, skin, Category 1, H317

Label elements:

CLP Regulation (EC) n° 1272/2008:



Danger

Hazard statements:

Flam. Liq. 2: H225 - Highly flammable liquid and vapour

Skin Irrit. 2: H315 - Causes skin irritation

Skin Sens. 1: H317 - May cause an allergic skin reaction

Precautionary statements:

P210: Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking P264: Wash thoroughly after use

Automark Technologies (India) Pvt. Ltd.

P280: Wear protective gloves/protective clothing/eye protection/face protection P302+P352: IF ON SKIN:

Wash with plenty of water

P303+P361+P353: IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower P370+P378: In case of fire: Use ABC powder extinguisher to extinguish.

P403+P235: Store in a well-ventilated place. Keep cool

P501: Dispose of contents and / or containers in accordance with regulations on hazardous waste or packaging and packaging waste respectively

Substances that contribute to the classification

Methyl methacrylate; Butyl acrylate; Methacrylic acid, monoester with propane-1,2-diol

Other hazards:

Non-applicable

SECTION 3: COMPOSITION/INFORMATION on INGREDIENTS

Substance	Weight %
1. MMA resin	10 - 30
2. Pigment & extenders	0 - 40
3. Additives	2 – 5
4. Quartz	20-30

SECTION 4: FIRST AID MEASURES

Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

This product is not classified as hazardous through inhalation, however, it is recommended in case of intoxication symptoms to remove the person affected from the area of exposure, provide clean air and keep at rest. Request medical attention if symptoms persist.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should

Automark Technologies (India) Pvt. Ltd.

not be removed as this could worsen the injury caused if it is stuck to the Skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, as this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration:

Do not induce vomiting, but if it does happen keep the head down to avoid aspiration. Keep the person affected at rest. Rinse out the mouth and throat, as they may have been affected during ingestion.

Most important symptoms and effects, both acute and delayed:

Acute and delayed effects are indicated in sections 2 and 11.

Indication of any immediate medical attention and special treatment needed:

Non-applicable

SECTION 5: FIRE-FIGHTING MEASURES

Extinguishing media:

If possible use polyvalent powder fire extinguishers (ABC powder), alternatively use foam or carbon dioxide extinguishers (CO₂). IT IS RECOMMENDED NOT to use tap water as an extinguishing agent.

Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and individual respiratory equipment. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Destroy any

Automark Technologies (India) Pvt. Ltd.

source of ignition. In case of fire, refrigerate the storage containers and tanks for Products susceptible to inflammation, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Isolate leaks provided that there is no additional risk for the people performing this task. Evacuate the area and keep out those without protection. Personal protection equipment must be used against potential contact with the spilt product (See section 8). Above all prevent the formation of any vapour-air flammable mixtures, through either ventilation or the use of an inertization agent. Destroy any source of ignition. Eliminate electrostatic charges by interconnecting all the conductive surfaces on which static electricity could form, and also ensuring that all surfaces are connected to the ground.

Environmental precautions:

This product is not classified as hazardous to the environment. Keep product away from drains, surface and underground water.

Methods and material for containment and cleaning up:

It is recommended:

Absorb the spillage using sand or inert absorbent and move it to a safe place. Do not absorb in sawdust or other combustible absorbents. For any concern related to disposal consult section 13.

Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling:

A.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Transfer in well ventilated areas, preferably through localized extraction. Fully control sources of ignition (mobile phones, sparks,...) and ventilate

Automark Technologies (India) Pvt. Ltd.

during cleaning operations. Avoid the existence of dangerous atmospheres inside containers, applying inertization systems where possible. Transfer at a slow speed to avoid the creation of electrostatic charges. Against the possibility of electrostatic charges: ensure a perfect equipotential connection, always use groundings, do not wear work clothes made of acrylic fibers, preferably wearing cotton clothing and conductive footwear. Comply with the essential security requirements for equipment and systems defined in Directive 94/9/EC (ATEX 100) and with the minimum requirements for protecting the security and health of workers under the selection criteria of Directive 1999/92/EC (ATEX 137). Consult section 10 for conditions and materials that should be avoided.

C.- Technical recommendations to prevent ergonomic and toxicological risks

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

D.- Technical recommendations to prevent environmental risks

It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Minimum Temp.: 5°C

Maximum Temp.: 35°C

Maximum time : 12 months

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

Automark Technologies (India) Pvt. Ltd.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

PROTECTIVE EQUIPMENT



PROCESS CONDITIONS :

Provide eyewash station.

ENGINEERING MEASURES :

Provide adequate ventilation, including appropriate local extraction, to ensure that the defined workplace exposure limit is not exceeded. All handling to take place in well-ventilated area.

RESPIRATORY EQUIPMENT :

Provide adequate ventilation. Observe Workplace Exposure Limits and minimize the risk of inhalation of vapours. At work in confined or poorly ventilated spaces, respiratory protection with air supply must be used. Wear mask supplied with: Gas cartridge suitable for organic substances.

HAND PROTECTION :

For prolonged or repeated skin contact use suitable protective gloves. Use protective gloves made of: Neoprene. Nitrile. Rubber (natural, latex).

EYE PROTECTION :

Wear splash-proof eye goggles to prevent any possibility of eye contact.

OTHER PROTECTION :

Wear appropriate clothing to prevent any possibility of skin contact.

HYGIENE MEASURES :

DO NOT SMOKE IN WORK AREA! Wash at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. Use appropriate skin cream to prevent drying of skin. When using do not eat, drink or smoke.

Automark Technologies (India) Pvt. Ltd.

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

1. APPEARANCE	Liquid
2. COLOUR	White
3. ODOUR	Characteristic
4. SOLUBILITY	Immiscible with water, soluble in organic solvent
5. RELATIVE DENSITY	1.85 approx 30°C
6. VAPOUR DENSITY	(air=1) Heavier than air
7. Flammability	
i. Flash point	19°C
ii. Autoignitation temp	292°C
iii. Lower flammability limit	1.5 % volume
iv. Upper flammability limit	12.5% volume

SECTION 10: STABILITY AND REACTIVITY

Reactivity:

No hazardous reactions are expected if the following technical instructions storage of chemicals. See section 7.

Chemical stability:

Chemically stable under the conditions of storage, handling and use.

Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

Conditions to avoid:

Applicable for handling and storage at room temperature:

Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity
Not applicable	Not applicable	Risk of combustion	Avoid direct impact	Not applicable

Acids	Water	Combustive materials	Combustible materials	Others
Not applicable	Not applicable	Avoid direct impact	Not applicable	Avoid alkalis or strong bases

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO₂), carbon monoxide and other organic compounds.

Automark Technologies (India) Pvt. Ltd.

SECTION 11: TOXICOLOGICAL INFORMATION

GENERAL INFORMATION:

Prolonged and repeated contact with solvents over a long period may lead to permanent health problems. May cause harm to the unborn child. Possible risk of impaired fertility. Danger of cumulative effects.

INHALATION:

In high concentrations, vapours may irritate throat and respiratory system and cause coughing. In high concentrations, vapours are narcotic and may cause headache, fatigue, dizziness and nausea.

INGESTION :

Gastrointestinal symptoms, including upset stomach. SKIN CONTACT Prolonged or repeated exposure may cause severe irritation. EYE CONTACT May cause temporary eye irritation.

OTHER HEALTH EFFECTS :

Carcinogen Category 3. Toxic to Reproductive Health Categ. 2. Toxic to Reproductive Health Categ. 3.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICITY :

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

SECTION 13: DISPOSAL CONSIDERATIONS

GENERAL INFORMATION :

Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority.

DISPOSAL METHODS :

Dispose of waste and residues in accordance with local authority requirements. Absorb in vermiculite or dry sand, dispose in licensed hazardous waste.

Automark Technologies (India) Pvt. Ltd.

SECTION 14: TRANSPORT INFORMATION

Transport of dangerous goods by land:

With regard to ADR 2015 and RID 2015:

14.1 UN number:	UN1263
14.2 UN proper shipping name:	PAINT
14.3 Transport hazard class(es):	3
Labels:	3
14.4 Packing group:	III
14.5 Dangerous for the environment:	No
14.6 Special precautions for user	
Special regulations:	163, 367, 650
Tunnel restriction code:	D/E
Physico-Chemical properties:	see section 9
Limited quantities:	5 L
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:	Non-applicable

Transport of dangerous goods by sea:

With regard to IMDG 37-14:

14.1 UN number:	UN1263
14.2 UN proper shipping name:	PAINT
14.3 Transport hazard class(es):	3
Labels:	3
14.4 Packing group:	III
14.5 Dangerous for the environment:	No
14.6 Special precautions for user	
Special regulations:	163, 223, 944, 955
EmS Codes:	F-E, S-E
Physico-Chemical properties:	see section 9
Limited quantities:	5 L
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code:	Non-applicable

SECTION 15: REGULATORY INFORMATION

Safety, health and environmental regulations/legislation specific for the

substance or mixture: Candidate substances for authorization under the Regulation (EC) 1907/2006 (REACH): Non-applicable Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable
Regulation (EC) 1005/2009, about substances that deplete the ozone layer: Non-applicable

Article 95, REGULATION (EU) No 528/2012: Non-applicable

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Limitations to commercialization and the use of certain dangerous substances and mixtures (Annex XVII, REACH):

Shall not be used, as substance or as mixtures in aerosol dispensers where these aerosol dispensers are intended for supply to the general public for entertainment and decorative purposes such as the following:

- metallic glitter intended mainly for decoration,
- artificial snow and frost,
- "whoopee" cushions,
- silly string aerosols,
- imitation excrement,
- horns for parties,
- decorative flakes and foams,
- artificial cobwebs,
- Stink bombs.

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

Automark Technologies (India) Pvt. Ltd.

SECTION 16 : Other information:

The information contained in this safety data sheet is based on the present state of knowledge and EU and national legislation. It provides guidance on health, safety and environmental aspects necessary for handling the product in a safe way and should not be constructed as any guarantee of the technical performance or suitability for particular applications.

It is always the duty of the user/employer to ascertain that the work is planned and carried out in accordance with the national regulations.

The information contained herein is based on the present state of our knowledge and does not therefore guarantee certain properties. Therefore neither **Automark Technologies (India) Pvt. Ltd.**, nor its agents will be liable for any injury, loss or damage. No person is authorized to make any statement or recommendation not contained in the Material Safety Data Sheet, and any such statement or recommendation, if made shall not bind the corporation.