



MATERIAL SAFETY DATA SHEET

Aluminium Coating Ink

SECTION 1: Identification of the substance / mixture and of the company / undertaking

1.1 Product Identifiers

Product name : Aluminium Coating Ink
 Brand : DM-UVR-12001
 Product codes : Research Batch _ This MSDS is for product trials only
 REACH No. : Not available. Annual tonnage does not require a registration.

1.2 Relevant identified uses of the substance or mixture and uses advised against

Identified uses : Scientific research and development, professional use only. Screen Printing Paste

1.3 Details of the supplier of the safety data sheet

Company : Dycotec Materials Ltd
 Unit 12 Star West,
 Westmead Drive, Westlea,
 Swindon, Wiltshire SN5 7SW, UK
 Telephone : +44 (0) 1788 814025
 E-mail address : info@dycotecmaterials.com

1.4 Emergency telephone number

Emergency Phone No. : +44 (0) 7495 248908 Only available during office hours

SECTION 2: Hazards Identification

2.1 Classification of the substance or mixture

Physical hazards : H225
 Health hazards : H315 H317 H319 H336
 Environmental hazards : H412
 Physicochemical : Stable under ordinary conditions of storage for flammable liquids

2.2 Label elements

Pictogram



Signal word : Danger
 Hazard statements : H225 – Highly flammable liquid and vapour
 H315 – Causes skin irritation
 H317 – May cause an allergic skin reaction
 H319 – Causes serious eye irritation
 H336 – May cause drowsiness or dizziness
 H412 – Harmful to aquatic life with long lasting effects
 Precautionary statements : P210 – Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
 No smoking.
 P264 – Wash hand thoroughly after handling.
 P270 – Do not eat, drink or smoke when using this product.
 P280 – Wear protective gloves/protective clothing/eye protection/face protection.
 P301+P312 – IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
 P330 – Rinse mouth
 P302 + P352 – IF ON SKIN: Wash with plenty of soap and water.
 P333 + P313 – If skin irritation or rash occurs: Get medical advice/attention.
 P362 – Take off contaminated clothing and wash before reuse.
 P261 – Avoid breathing dust/fumes/gas/mist/vapours/spray.
 P272 – Contaminated work clothing should not be allowed out of the workplace.
 P305+P351+P338 – IF IN EYES: Rinse cautiously with water for several minutes.
 Remove contact lenses, if present and easy to do. Continue rinsing.
 P337+P313 – If eye irritation persists: Get medical advice / attention

P271 – Use only outdoors or in a well-ventilated area.

P304+P340+P312 – IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Call a POISON CENTER or doctor/physician if you feel unwell

P273 – Avoid release to the environment

P501 – Dispose off contents/container in accordance with local/regional/national/international regulations

2.3 Other hazards

No data available

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2 Mixtures

Blender Mixture; Synonyms:		< 40%
CAS #:	EC #:	
Classification	H315, H317, H319, H412	

Aluminium flake		< 15%
CAS #: 7429-90-5	EC #: 231-072-3	
Classification		

2-Propanol; Synonyms:		<50%
CAS #: 67-64-1	EC #: 200-662-7	
Classification	H225, H319, H336	

Acetone; Synonyms:		Bal.
CAS #: 67-63-0	EC #: 200-662-2	
Classification	H225, H319, H336	

Curing promotor ; Synonyms:		< 2%
CAS #:	EC #:	
Classification	H315	

The full text for all Hazard Statements are displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General information

Remove affected person from source of contamination. Remove contaminated clothing. First aid personnel must be aware of own risk during rescue. Consult a physician. Show this safety data sheet to the doctor in attendance.

Inhalation

If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

Ingestion

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with plenty of water. Consult a physician

Skin contact

Flush with copious amounts of soap and water for at least 15 minutes. Remove contaminated clothing and shoes. Seek medical attention if irritation develops or persists. Wash clothing before reuse. Thoroughly clean shoes before reuse

Eye contact

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician

SECTION 5: FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

Carbon dioxide. Sand. Alcohol resistant foam. Dry powder.

5.2 Special hazards arising from the substance or mixture

Harmful vapours. Carbon dioxide, Metal oxides

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary

5.4 Further information

The product itself does not burn under normal storage condition.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust. For personal protection see section 8.

6.2 Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

6.3 Methods and materials for containment and cleaning up

Wipe up with inert absorbent material and disposal of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist. Keep away from source of ignition – No smoking. Take measures to prevent the build up of electrostatic charge.

7.2 Conditions for safe storage, including any incompatibilities

Kept upright to prevent leakage. Store in cool place. Keep container tightly closed in a dry and well-ventilated place. Storage class: Flammable liquids

7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters – Components with workplace control parameters

No occupational exposure limits known.

8.2 Exposure Controls**Protective equipment****Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

Eye/face protection

Use approved safety glasses with side shields. Eyewear complying with an approved standard should be worn if a risk assessment indicate eye contact is possible. The following protection should be worn: Chemical splash goggles or face shield.

Hand protection

Handle with gloves. Gloves must be inspected prior to use. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it. Wear protective gloves made of the following material: Nitrile rubber. The most suitable glove should be chosen in consultation with the glove supplier/manufacturer, who can provide information about the breakthrough time of the glove material. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Other skin and body protection

Impervious clothing, Flame retardant antistatic protective clothing., The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Hygiene measures

Do not smoke in work area. Wash hands thoroughly after handling. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke. Contaminated clothing should be placed in a closed container for disposal of decontamination. Warn cleaning personnel of any hazardous properties of the product.

Respiratory protection

If ventilation is inadequate, suitable respiratory protection must be worn. Wear a respirator fitted with the following cartridge: Combination filter, type A2/P3. In confined or poorly ventilated spaces, a supplied air respirator must be worn.

Control of environmental exposure

Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	liquid slurry
Colour	gray

Odour	No data available
Odour Threshold	No data available
pH	No data available
Melting / freezing point	No data available
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	No data available
Water solubility	No data available
Partition coefficient	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidizing properties	No data available

9.1 Other information

Surface tension 22.30 mN/m

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions. Stable at normal ambient temperatures.

10.3 Possibility of hazardous reactions

The product can polymerize if the shelf life or storage temperature are greatly exceeded. Heat develops during polymerization. Reacts with peroxide and other radical components.

10.4 Conditions to avoid

Heat, flames and sparks

10.5 Incompatible materials

Oxidizing agents, Acid anhydrides, Acids, Strong alkalis, Peroxides, Amines, Halogenated compounds

10.6 Hazardous decomposition products

Other decomposition products - no data available

In the event of fire - see section 5

SECTION 11: TOXICOLOGICAL INFORMATION

Acute toxicity: Mixture. No known toxicological effects from this product.

Skin corrosion/irritation: Mixture. No data available

Germ cell mutagenicity: Mixture. No data available

Carcinogenicity: Mixture. No data available

Reproductive toxicity: Mixture. No data available

Specific target organ toxicity – single exposure: Mixture. No data available

Specific target organ toxicity – repeated exposure: Mixture. No data available

Aspiration hazard: Mixture. No data available

Signs and Symptoms of Exposure: Mixture. No data available

Additional Information: Mixture. No data available.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Do not empty into drains, soil or bodies of water. Toxic to aquatic organisms, may cause long term adverse effects in the aquatic environment

12.1 Toxicity

no data available

12.2 Persistence and degradability

no data available

12.3 Bioaccumulative potential

no data available

12.4 Mobility in soil

no data available

12.5 Results of PBT and vPvB assessment

no data available

12.6 Other adverse effects

no data available

SECTION 13: DISPOSAL CONSIDERATIONS**13.1 Waste treatment methods****General Information**

When handling waste, the safety precautions applying to handling of the product should be considered. Do not dump into any sewers, on the ground, or into any body of water. Not to be disposed of together with household waste. Any disposal practice must be in compliance with all local and national laws and regulations. Handle and dispose contaminated packages in the same way as the product itself. Fully cured product residues are generally not regarded as hazardous waste.

Disposal methods

Burn in a chemical incinerator equipped with an afterburner and scrubber but exert extra care in igniting as this material is highly flammable. Offer surplus and non-recyclable solutions to a licensed disposal company.

Contaminated packaging

Dispose of as unused product.

SECTION 14: TRANSPORT INFORMATION**14.1 UN number**

ADR/RID	IMDG	IATA
UN1219	UN1219	UN1219

14.2 UN proper shipping name

ADR/RID	IMDG	IATA
Isopropanol		

14.3 Transport hazard class(es)

ADR/RID	IMDG	IATA
3		

14.4 Packaging group

ADR/RID	IMDG	IATA
II		

14.5 Environmental hazards

ADR/RID	IMDG Marine pollutant	IATA
yes	yes	yes

14.6 Special precautions for user

Read safety instructions, SDS and emergency procedures before handling

SECTION 15: REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

no data available

15.2 Chemical Safety Assessment

no data available

SECTION 16: OTHER INFORMATION**General Information**

The above information is believed to be correct but does not purport to be all inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and is applicable to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Employers should use this information only as a supplement to other information gathered by them, and should make independent judgement of suitability of this information to ensure proper use and protect the health and safety of employees.

This information is finished without warranty and any use of the product not in conformance with this Material Safety Data Sheet, or in combination with any other product or process, is the responsibility of the user.

This is an experimental product. This safety data sheet is for product trials only!

Hazard statements in full

H225 – Highly flammable liquid and vapour. Category 2

H315 – Causes skin irritation. Category 2

H317 – May cause an allergic skin reaction. Category 1

H319 – Causes serious eye irritation. Category 2

H336 – May cause drowsiness or dizziness . Category 3

H412 – Harmful to aquatic life with long lasting effects. Category 3