

Material Safety Data Sheet

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

1.1 Product identifiers

Product name: **WHITEBOARD MARKER**
Item code : **92101,92104, 92107, 92108, 92140, 92180**
Color: Black, blue, red & green
:

1.2 Details of the supplier of the safety data sheet

Company: DIXON TICONDEROGA COMPANY
2525 N. CASALOMA DR. APPLETON, WI 54913

Telephone: 1-800-333-2545

Fax: 1-800-332-5099

SECTION 2: Hazards identification

2.1 Classification

1) Ink

Classification according to Regulation (EC) No 1272/2008

2.2 Label elements

1) Ink

Danger symbols : F

R-Phrases : R11

Danger Identification : Highly flammable.

2.3 Other Hazard-none

SECTION 3: Composition / information on ingredients

This product is not considered a hazardous substance as defined in the OSHA Hazard Communication Standard (29 CFR 1910.1200)

SECTION 4: First aid measures

1) Ink

a) Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance.

Skin contact

Wash skin with soap and water. Remove contaminated clothing, which should be washed or dry cleaned before reuse. If irritation persists, obtain medical attention.

Eye contact

Wash eyes with copious amounts of water. Continue to rinse for at least 15 minutes and obtain medical attention.

Inhalation

Remove from exposure - in severe cases obtain medical attention.

Ingestion

Give plenty to drink if ingestion is suspected. Do not induce vomiting. Never give anything by mouth to an unconscious person. Loosen tight clothing such as a collar, tie, belt or waistband.

Get medical attention if symptoms appear.

b) Symptoms and Effects**Skin contact**

May cause irritation

Eye contact

May cause irritation

Inhalation

In high concentrations, may cause headache, nausea, drowsiness, dizziness

Ingestion

Ingestion of large amount may cause nausea, vomiting, abdominal pain.

SECTION 5 : Fire-fighting measures**1) Ink****Hazard**

Flash point 12C (Closed cup). Explosive limits : lower limit 3.5% to 19% upper limit.

Extinguishing Media

Use water spray, foam, CO₂, or dry powder

Special Exposure Hazards

Closed container may rupture if strongly heated. Cool containers with water spray in order to

prevent pressure build up, auto-ignition or explosion. Vapours may flow along surfaces to distant ignition sources and flash back.

Personal Protective Equipment

Wear self-contained positive pressure breathing apparatus (SCBA) and full turnout gear.

2) Polypropylene

Extinguishing media

Suitable extinguishing media are dry chemical fire extinguishers, carbon dioxide fire extinguisher, foam, water fog or fine spray.

Special hazards arising from the substance or mixture

During a fire, smoke contain the original material in addition to combustion products of varying composition which may be toxic or irritation.

Special protective equipment and precautions for firefighters

Wear fire fighting clothing (helmet, coat, trousers, boots and gloves).
Keep people away. Cool surroundings with water to localize fire zone.
Hand held dry chemical or CO2 extinguishers may be used for small fires.

3) Polyester

Extinguishing media

Agents for Class A hazards - Water, Foam, Halogenated agents.

Special hazards arising from the substance or mixture

Protect from smoke inhalation, decomposition and combustion products. Use self-contained breathing apparatus.

Special protective equipment and precautions for firefighters

Not established.

SECTION 6 : Accidental release measure

1) Ink

Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes. Ventilate contaminated area thoroughly. Do not breathe vapour.
Extinguish naked flames. Remove ignition sources. No smoking. Avoid Sparks. Evacuate the area of all non-essential personnel. Shut off leaks, if possible without personal risk.

Environmental precautions

Do not allow runoff to sewer. If this occurs inform authorities.

Methods and materials for containment and cleaning up

Absorb spillages with vermiculite, dry sand or earth and transfer into marked sealable drums.
Flush contaminated area with plenty of water. Retain washings as contaminated waste.

2) Polypropylene

Personal precautions, protective equipment and emergency procedures

Isolate the hazard area. Use appropriate safety equipment. Spilled material may cause a slipping hazard.

Environmental precautions

Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

Methods and materials for containment and cleaning up

Contain spilled material if possible. Sweep up.
Collect in suitable containers.

3) Polyester

Personal precautions, protective equipment and emergency procedures

No specific measure are necessary.

Environmental precautions

No specific measure are necessary.

Methods and materials for containment and cleaning up

No specific measure are necessary.

SECTION 7 : Handling and storage

1) Ink

Handling

Product is not intended nor should be allowed to maintain prolonged skin contact. Ensure good ventilation or the provision of local exhaust ventilation where possible. Avoid contact with eyes, skin and clothing, avoid ingestion and inhalation. Avoid sources of ignition.

Storage

Keep away from direct sunlight and other sources of heat or ignition. Keep away from oxidizing

agents. Do not smoke in storage areas. Keep container tightly closed and in a well-ventilated place.

Product Transfer

Low flash point - requires attention to equipment used in transport and use so as to avoid sparks and other sources of ignition. Take precautionary measures against static discharges. Earth all equipment. Avoid splash filling. Do not empty into drains. Store ink at least 24 hours at around room temperature and then agitate before assembly.

2) Polypropylene

Precaution for safe handling

Good housekeeping and controlling of dusts are necessary for safe handling of product. Dust can be ignited by static discharge.

Condition for safe storage including incompatibilities;

Store in accordance with good manufacturing practices.

3) Polyester

Precaution for safe handling

No specific measure are necessary.

Condition for safe storage including incompatibilities;

No specific measure are necessary.

SECTION 8 : Exposure controls / personal protection

1) Ink

Exposure limit values

Denatured Ethanol EH40(UK)

OES : 1000ppm Period : 8hrs

OES : 1900mg/m³ Period : 8hrs

ISO-Propanol EH40 (UK)

LTEL :999mg/m³ Period : 8hours STEL : 1250mg/m³

Respiratory protection

Avoid inhalation of the vapours when the product is being used. Local exhaust ventilation (LEV) should be used in conjunction with other control measures as a means of removing material accidentally released. Type approved RPE for organic vapours if required.

Hand protection

Wear chemical resistant butyl rubber gloves.

Eye Protection

Wear safety glasses. Provide eyewash station.

Skin protection

Wear suitable protective clothing and anti-static safety shoes. Provide safety shower.

2) Polypropylene

Exposure limits in the air of the workplace, biological limit values;

Not applicable

Appropriate engineering controls

Good general ventilation should be adopted.

Local exhaust ventilation may be necessary for some operations.

Individual protection measures

Respiratory protection

Use an approved air-purifying respirator when vapors are generated at increased temperatures or when dust or mist is present.

The following should be effective types of air-purifying respirators

- Particulate filter
- Organic vapor cartridge with a particulate pre-filter

Eye protection

Use safety glasses. Wear chemical goggles. Set up the emergency washing unit near working area.

Hand protection

Use gloves with insulation for thermal protection.

Body protection

No precautions other than clean body-covering clothing should be needed.

3) Polyester

General advice

Do not eat or swallow while working and no smoking.

SECTION 9 : Physical and chemical properties
1) Ink

| | |
|---------------------------|---|
| Appearance : | Coloured liquid |
| Physical State : | Liquid |
| Odour : | Characteristic odour of alcohol solvent |
| Viscosity : | 5 to 14CP |
| pH : | 4 to 12 |
| Volatility : | Approx 80% |
| Miscibility : | Solvents miscible with water |
| Boiling Point : | 78.3 °C |
| Flash Point : | 12 °C |
| Auto-ignition Temperature | 365 °C |
| Explosive Limits : | Lower limit 3.5% to 19% upper limit (volume % in air) |

2) Polypropylene

| | |
|--|----------------------------------|
| Appearance : | Pellet with white or milky color |
| Odour : | Odorless |
| Odour threshold : | Data not available |
| pH : | Data not available |
| Melting point/Freezing point | 140~170°C / 110~ 135°C |
| Initial boiling point and boiling range : | Data not available |
| Flash point : | Data not available |
| Evaporation rate : | Data not available |
| Flammability : | Data not available |
| Upper/lower flammability or explosive limits : | Data not available |
| Vapour pressure : | Data not available |
| Solubility : | Data not available |
| Vapour density : | Data not available |
| Specific gravity : | 0.9 |
| Partition coefficient : n-octanol/water : | Data not available |
| Auto-ignition temperature : | 350°C |
| Decomposition temperature : | Data not available |
| Viscosity : | >100PaS at 190°C 100 1/s |

3) Polyester

| | |
|-----------------------------|---------------------|
| Appearance : | Solid |
| Odour : | Odorless |
| Boiling point : | Data not available |
| Flash point : | Data not available |
| Melting Point : | 155 ~ 170 °C |
| Ignition Point : | 400 °C |
| Decomposition temperature : | 0.9 ~ 0.92 g/Cm x 2 |
| Density at 20 °C | |

SECTION 10 : Stability and reactivity
1) Ink**Stability**

Stable under normal conditions.

Conditions to avoid

Heat, flames and other sources of ignition.

Materials to avoid

Reacts strongly with oxidising agents. Can also react with acid chlorides, acid anhydrides, aluminium and copper. It may attack some forms of plastic and rubber.

Hazardous decomposition products

Fire produces smoke, carbon monoxide, carbon dioxide and water.

2) Polypropylene**Chemical stability**

Stable at room temperature and atmospheric pressure.

Possibility of hazardous reactivity

Will not occur

Conditions to avoid

Exposure to elevated temperature. Flame. Ignition source.

Incompatible materials

Data not available

Hazardous decomposition products

Processing may release fumes and other decomposition products. Fumes can be irritating.

3) Polyester

Stability

Polyester will begin to shrink/stick at 440 degrees F; disintegrates in strong alkalies at boiling.

Compatibility with other substances

Polyester dissolves by strong alkalies at high concentrations and temperatures. Partial decomposition by concentrated solutions of nitric, sulfuric and carbolic acids. Unsuitable for some phenolic compounds and can be affected by cyclohexanone above 300 degrees F.

Hazardous decomposition products

May include carbon, hydrogen and oxygen. The exact composition depends upon the condition of combustion.

Reactivity

Polyester has good resistance to most organic and mineral acids and to weak alkalies.

SECTION 11 : Toxicological information

1) Ink

Acute effects

May cause irritation

Sensitisation

Allergic skin reaction/dermatitis could occur with misuse of this preparation.

2) Polypropylene

Inhalation exposure

Dust inhalation may cause cough.

Ingestion exposure

Data not available

Skin exposure

Data not available

Eye exposure

Data not available

3) Polyester

Acute or chronic effects

None

Effects of overexposure

None under normal handling

Carcinogenicity

Negligible to 0 free formaldehyde after processing.

SECTION 12 : Ecological information

1) Ink

Ecotoxicity

Prevent contamination of soil and water. Prevent from spreading or entering into drains, ditches or rivers by using sand, earth, or other appropriate barriers.

Mobility

Mobile liquid. Prevent contamination of soil or water. Prevent from spreading or entering into drains, ditches or rivers by using sand, earth or other appropriate barriers.

Persistence and degradability

Solvents are biodegradable

Bioaccumulative potential

This product shows a low bioaccumulation potential

2) Polypropylene

Aquatic, terrestrial organisms toxicity

Data not available

Persistence and degradability

Data not available

Bioaccumulative potential

Data not available

Mobility in soil

Data not available

Other adverse effects

Data not available

3) Polyester

Ecotoxicity

Data not available

Mobility

Data not available

Persistence and degradability

Data not available

Bioaccumulative potential

Data not available

SECTION 13 : Disposal considerations

1) Ink

Substance/preparation

Do not pour into drains. Obtain the services of a waster disposal contractor for advice. Otherwise, send to a registered top or dispose of in a safe area under controlled conditions of incineration to comply with local and national regulations.

Waster residues

As above

Contaminated packaging

Consider recycling or incineration.

2) Polypropylene

Disposal methods

All disposal practices must be in compliance with all Federal, state/provincial and local laws and regulations.

Disposal considerations (Specify disposal container and methods)

Data not available

3) Polyester

Disposal methods

All disposal must be in accordance with applicable federal, state and/or local regulations.

SECTION 14 : Transport information

1) Ink

UN NO. : 1993

Proper shipping name : Flammable liquid n.o.s (Contains Isopropanol)

ADR, IATA, IMDG Hazard Class : 3

Packing Group : 2

2) Polypropylene

UN NO. : Not regulated

Proper shipping name : Not regulated

ADR, IATA, IMDG Hazard Class : Not regulated

Packing Group : Not regulated

3) Polyester

UN NO. : Not regulated

Proper shipping name : Not regulated

ADR, IATA, IMDG Hazard Class : Not regulated

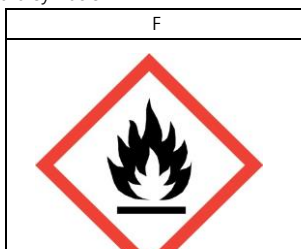
Packing Group : Not regulated

SECTION 15 : Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1272/2008.

1) Ink

Hazard symbols





R-phrases

R11 : Highly flammable

S-phrases

S2 : Keep out of reach of children

S7 : Keep container tightly closed

S16 : Keep away from sources of ignition. No smoking.

2) Polypropylene**Safety, health and environmental regulations specific for the product in question:**

USA

- CERCLA 103 (40CFR302.4) : Not regulated
- SARA 302 (40CFR355.30) : Not regulated
- CERCLA 304 (40CFR355.40) : Not regulated
- CERCLA 313 (40CFR372.65) : Not regulated
- OSHA (29CFR1910.119) : Not regulated
- California proposition 65 : Not regulated

EU

- EC Classification : not determined

ETD

- TSCA : Not listed
- TSCA 12(b) : Not listed

3) Polyester

no data available

SECTION 16 : Other information**Further information**

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Sources of key data used to compile the data sheet:

- EC Directive 67/548/EC resp. 99/45/EC as amended in each case.
- Regulation (EC) No 1272/2008 (REACH) as amended in each case.
- National Threshold Limit Values of the corresponding countries as amended in each case.
- Transport regulations according to ADR, RID, IMDG, IATA as amended in each case.
- Institute for Health and Consumer Protection (IHCP).
- European Chemicals Agency (ECHA).
- ChemIDplus Lite.
- Chemicals Information System (NCIS).
- U.S. Environmental Protection Agency.
- United States National Library of Medicine (NLM).
- International Agency for Research on Cancer (IARC).
- Incorporated Administrative Agency National Institute of Technology and Evaluation. (NITE).
- Raw material company's MSDS

The information contained herein does not constitute the user's own assessment of workplace risk as required by other health and safety legislation. The above information is provided in good faith and is based on our present knowledge. It shall not constitute a guarantee for any specific product feature and shall not establish a legally valid contractual arrangement. Above products are not at least in the quality.

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Version

No.2