

SAFETY DATA SHEET

1. Identification

Product identifier	Dykem® High Purity Action Marker - White
Other means of identification	
Part Number	44729
Synonyms	Hi Purity AM 33- Fine, and 44-Medium * FORMULA CODE: * P729 (White)
Recommended use	Solvent based marker
Recommended restrictions	None known.
Manufacturer/Importer/Supplier/Distributor information	
Manufacturer	
Company name	ITW Pro Brands
Address	805 E. Old 56 Highway Olathe, KS 66061
Country	(U.S.A.) Tel: +1 800-443-9536
In Case of Emergency	1-800-535-5053 (Infotrac)
Supplier	ITW Permatex Canada 2360 Bristol Circle, Ste 101 Oakville, ON Canada L6H 6M5 Canada 1-800-241-8334

2. Hazard identification

Physical hazards	Flammable liquids	Category 3
Health hazards	Skin corrosion/irritation	Category 2
	Serious eye damage/eye irritation	Category 2A
	Carcinogenicity	Category 2
	Specific target organ toxicity, single exposure	Category 3 respiratory tract irritation
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
Environmental hazards	Not classified.	
Label elements		



Signal word	Warning
Hazard statement	Flammable liquid and vapor. Causes skin irritation. Causes serious eye irritation. May cause respiratory irritation. May cause drowsiness or dizziness. Suspected of causing cancer.
Precautionary statement	
Prevention	Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Keep container tightly closed. Ground and bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Avoid breathing mist/vapors. Wash thoroughly after handling. Use only outdoors or in a well-ventilated area. Wear protective gloves/protective clothing/eye protection/face protection.

Response	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF INHALED: Remove person to fresh air and keep comfortable for breathing. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF exposed or concerned: Get medical advice/attention. If skin irritation occurs: Get medical advice/attention. If eye irritation persists: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. In case of fire: Use appropriate media to extinguish.
Storage	Keep cool. Store in a well-ventilated place. Keep container tightly closed. Store locked up.
Disposal	Dispose of contents/container in accordance with local/regional/national/international regulations.
Other hazards	None known.
Supplemental information	None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Aromatic Solvent		64742-95-6	20 - 30
1,2,4-Trimethylbenzene		95-63-6	10 - 15
Cumene		98-82-8	0.1 - 1
Xylene		1330-20-7	0.1 - 1

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

4. First-aid measures

Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.
Skin contact	Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Eye contact	Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	May cause drowsiness or dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and treat symptomatically. Thermal burns: Flush with water immediately. While flushing, remove clothes which do not adhere to affected area. Call an ambulance. Continue flushing during transport to hospital. Keep victim under observation. Symptoms may be delayed.
General information	Take off all contaminated clothing immediately. IF exposed or concerned: Get medical advice/attention. If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Wash contaminated clothing before reuse.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Alcohol resistant foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	Vapors may form explosive mixtures with air. Vapors may travel considerable distance to a source of ignition and flash back. During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	In case of fire and/or explosion do not breathe fumes. Move containers from fire area if you can do so without risk.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	Flammable liquid and vapor.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Take precautionary measures against static discharge. Use only non-sparking tools.

Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Following product recovery, flush area with water.

Small Spills: Absorb with earth, sand or other non-combustible material and transfer to containers for later disposal. Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.

Never return spills to original containers for re-use. Put material in suitable, covered, labeled containers. For waste disposal, see section 13 of the SDS.

Environmental precautions

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling

Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not handle, store or open near an open flame, sources of heat or sources of ignition. Protect material from direct sunlight. When using do not smoke. Explosion-proof general and local exhaust ventilation. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Use non-sparking tools and explosion-proof equipment. Avoid breathing mist/vapors. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. Should be handled in closed systems, if possible. Wear appropriate personal protective equipment. Observe good industrial hygiene practices.

Conditions for safe storage, including any incompatibilities

Store locked up. Keep away from heat, sparks and open flame. Prevent electrostatic charge build-up by using common bonding and grounding techniques. Store in a cool, dry place out of direct sunlight. Store in tightly closed container. Store in a well-ventilated place. Keep in an area equipped with sprinklers. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. ACGIH Threshold Limit Values

Components	Type	Value
Cumene (CAS 98-82-8)	TWA	50 ppm
Titanium Dioxide (CAS 13463-67-7)	TWA	10 mg/m ³
Xylene (CAS 1330-20-7)	STEL	150 ppm
	TWA	100 ppm

Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
Cumene (CAS 98-82-8)	TWA	246 mg/m ³
		50 ppm
Titanium Dioxide (CAS 13463-67-7)	TWA	10 mg/m ³
Xylene (CAS 1330-20-7)	STEL	651 mg/m ³
		150 ppm
	TWA	434 mg/m ³
		100 ppm

Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)

Components	Type	Value	Form
Cumene (CAS 98-82-8)	STEL	75 ppm	
	TWA	25 ppm	
Titanium Dioxide (CAS 13463-67-7)	TWA	3 mg/m3	Respirable fraction.
		10 mg/m3	Total dust.
Xylene (CAS 1330-20-7)	STEL	150 ppm	
	TWA	100 ppm	

Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)

Components	Type	Value
Cumene (CAS 98-82-8)	TWA	50 ppm
Titanium Dioxide (CAS 13463-67-7)	TWA	10 mg/m3
Xylene (CAS 1330-20-7)	STEL	150 ppm
	TWA	100 ppm

Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)

Components	Type	Value
Cumene (CAS 98-82-8)	TWA	50 ppm
Titanium Dioxide (CAS 13463-67-7)	TWA	10 mg/m3
Xylene (CAS 1330-20-7)	STEL	150 ppm
	TWA	100 ppm

Canada. Quebec OELs. (Ministry of Labor - Regulation respecting occupational health and safety)

Components	Type	Value	Form
Cumene (CAS 98-82-8)	TWA	246 mg/m3	
		50 ppm	
Titanium Dioxide (CAS 13463-67-7)	TWA	10 mg/m3	Total dust.
Xylene (CAS 1330-20-7)	STEL	651 mg/m3	
		150 ppm	
	TWA	434 mg/m3	
		100 ppm	

Canada. Saskatchewan OELs (Occupational Health and Safety Regulations, 1996, Table 21)

Components	Type	Value
Cumene (CAS 98-82-8)	15 minute	74 ppm
	8 hour	50 ppm
Titanium Dioxide (CAS 13463-67-7)	15 minute	20 mg/m3
	8 hour	10 mg/m3
Xylene (CAS 1330-20-7)	15 minute	150 ppm
	8 hour	100 ppm

Biological limit values

ACGIH Biological Exposure Indices

Components	Value	Determinant	Specimen	Sampling Time
Xylene (CAS 1330-20-7)	1.5 g/g	Methylhippuric acids	Creatinine in urine	*

* - For sampling details, please see the source document.

Appropriate engineering controls	Explosion-proof general and local exhaust ventilation. Good general ventilation should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level. Provide eyewash station and safety shower.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Not normally needed. If contact is likely, safety glasses with side shields are recommended.
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves.
Other	Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.
Respiratory protection	If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure limits have not been established), an approved respirator must be worn.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Observe any medical surveillance requirements. When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state	Liquid.
Form	Liquid.
Color	White.
Odor	Aromatic.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	248 - 338 °F (120 - 170 °C)
Flash point	89.0 - 108.0 °F (31.7 - 42.2 °C)
Evaporation rate	< 1 (BuAc = 1)
Flammability (solid, gas)	Not applicable.

Upper/lower flammability or explosive limits

Flammability limit - lower (%)	1 %
Flammability limit - upper (%)	12.6 %
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.

Vapor pressure	Not available.
Vapor density	> 1 (air = 1)
Relative density	> 1 @ 70°F

Solubility(ies)

Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.

Auto-ignition temperature Not available.

Decomposition temperature Not available.

Viscosity Not available.

Other information

Explosive properties Not explosive.

Oxidizing properties Not oxidizing.

VOC 37.89%, 465 g/L

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Conditions to avoid	Avoid heat, sparks, open flames and other ignition sources. Avoid temperatures exceeding the decomposition temperature. Avoid temperatures exceeding the flash point. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Carbon oxides.

11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause drowsiness or dizziness. Headache. Nausea, vomiting. May cause irritation to the respiratory system. Prolonged inhalation may be harmful.
Skin contact	Causes skin irritation.
Eye contact	Causes serious eye irritation.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics May cause drowsiness or dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain.

Information on toxicological effects

Acute toxicity Not expected to be acutely toxic.

Components	Species	Test Results
1,2,4-Trimethylbenzene (CAS 95-63-6)		
Acute		
Dermal		
LD50	Rabbit	> 3200 mg/kg
Inhalation		
LC50	Rat	10000 mg/m ³ , 4 Hours
Oral		
LD50	Rat	3300 mg/kg
Aromatic Solvent (CAS 64742-95-6)		
Acute		
Dermal		
LD50	Rabbit	> 1900 mg/kg, 24 Hours
Inhalation		
<i>Vapor</i>		
LC50	Rat	> 5 mg/l, 4 Hours
Oral		
LD50	Rat	4800 mg/kg
Cumene (CAS 98-82-8)		
Acute		
Dermal		
LD50	Rabbit	> 3200 mg/kg, 24 Hours
Inhalation		
<i>Vapor</i>		
LC50	Mouse	10 mg/l, 7 Hours

Components	Species	Test Results
Fully Dimerized Resin (CAS 65997-05-9)		
Acute		
Dermal		
LD50	Rat	> 2000 mg/kg, 24 Hours
Oral		
LD50	Rat	1000 - 2000 mg/kg
SILICA, AMORPHOUS, FUMED (CAS 7631-86-9)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg, 24 Hours
Inhalation		
<i>Dust</i>		
LC50	Rat	> 0.14 mg/l, 4 Hours
Oral		
LD50	Rat	> 3300 mg/kg
Titanium Dioxide (CAS 13463-67-7)		
Acute		
Inhalation		
LC50	Rat	> 2.3 mg/l, 4 Hours
Oral		
LD50	Rat	> 2000 mg/kg
Xylene (CAS 1330-20-7)		
Acute		
Dermal		
LD50	Rabbit	12000 mg/kg, 24 Hours
Inhalation		
LC50	Rat	6400 mg/l, 4 Hours
Oral		
LD50	Rat	3500 mg/kg
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Causes serious eye irritation.	
Respiratory or skin sensitization		
Canada - Alberta OELs: Irritant		
Titanium Dioxide (CAS 13463-67-7)	Irritant	
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	This product is not expected to cause skin sensitization.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	Suspected of causing cancer.	
ACGIH Carcinogens		
Titanium Dioxide (CAS 13463-67-7)	A4 Not classifiable as a human carcinogen.	
Xylene (CAS 1330-20-7)	A4 Not classifiable as a human carcinogen.	
Canada - Manitoba OELs: carcinogenicity		
Titanium Dioxide (CAS 13463-67-7)	Not classifiable as a human carcinogen.	
Xylene (CAS 1330-20-7)	Not classifiable as a human carcinogen.	
IARC Monographs. Overall Evaluation of Carcinogenicity		
Cumene (CAS 98-82-8)	2B Possibly carcinogenic to humans.	
SILICA, AMORPHOUS, FUMED (CAS 7631-86-9)	3 Not classifiable as to carcinogenicity to humans.	
Titanium Dioxide (CAS 13463-67-7)	2B Possibly carcinogenic to humans.	
Xylene (CAS 1330-20-7)	3 Not classifiable as to carcinogenicity to humans.	

US. National Toxicology Program (NTP) Report on Carcinogens

Cumene (CAS 98-82-8)

Reasonably Anticipated to be a Human Carcinogen.

Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.
Specific target organ toxicity - single exposure	May cause respiratory irritation. May cause drowsiness or dizziness.
Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	Not likely, due to the form of the product.
Chronic effects	Prolonged inhalation may be harmful. Prolonged exposure may cause chronic effects.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
1,2,4-Trimethylbenzene (CAS 95-63-6)		
Aquatic		
Fish	LC50	Fathead minnow (<i>Pimephales promelas</i>) 7.19 - 8.28 mg/l, 96 hours
Cumene (CAS 98-82-8)		
Aquatic		
Crustacea	EC50	Brine shrimp (<i>Artemia</i> sp.) 3.55 - 11.29 mg/l, 48 hours
Fish	LC50	Rainbow trout, donaldson trout (<i>Oncorhynchus mykiss</i>) 2.7 mg/l, 96 hours
Titanium Dioxide (CAS 13463-67-7)		
Aquatic		
Crustacea	EC50	Water flea (<i>Daphnia magna</i>) > 1000 mg/l, 48 hours
Fish	LC50	Mummichog (<i>Fundulus heteroclitus</i>) > 1000 mg/l, 96 hours
Xylene (CAS 1330-20-7)		
Aquatic		
Fish	LC50	Bluegill (<i>Lepomis macrochirus</i>) 7.711 - 9.591 mg/l, 96 hours

Persistence and degradability No data is available on the degradability of any ingredients in the mixture.

Bioaccumulative potential

Partition coefficient n-octanol / water (log Kow)

Cumene	3.66
Xylene	3.12 - 3.2

Mobility in soil Not established.

Other adverse effects None known.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Dispose of contents/container in accordance with local/regional/national/international regulations.

Local disposal regulations Dispose in accordance with all applicable regulations.

Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.

Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).

Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

TDG

UN number	UN1263
UN proper shipping name	PAINT RELATED MATERIAL (including paint thinning or reducing compound) with not more than 20% nitrocellulose by mass if the nitrogen content of the nitrocellulose is not more than 12.6 per cent by mass

Transport hazard class(es)**Class** 3**Subsidiary risk** -**Packing group** III**Environmental hazards** Not available.**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.**IATA****UN number** UN1263**UN proper shipping name** Paint related material (including paint thinning or reducing compounds)**Transport hazard class(es)****Class** 3**Subsidiary risk** -**Packing group** III**Environmental hazards** No.**ERG Code** 3L**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.**Other information****Passenger and cargo aircraft** Allowed with restrictions.**Cargo aircraft only** Allowed with restrictions.**IMDG****UN number** UN1263**UN proper shipping name** PAINT (including paint, lacquer, enamel, stain, shellac, varnish, polish, liquid filler and liquid lacquer base) or PAINT RELATED MATERIAL (including paint thinning or reducing compound)**Transport hazard class(es)****Class** 3**Subsidiary risk** -**Packing group** III**Environmental hazards****Marine pollutant** No.**EmS** F-E, S-E**Special precautions for user** Read safety instructions, SDS and emergency procedures before handling.**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable.**IATA; IMDG; TDG****15. Regulatory information****Canadian regulations**

This product has been classified in accordance with the hazard criteria of the HPR and the SDS contains all the information required by the HPR.

Controlled Drugs and Substances Act

Not regulated.

Export Control List (CEPA 1999, Schedule 3)

Not listed.

Greenhouse Gases

Not listed.

Ontario. Toxic Substances. Toxic Reduction Act, 2009. Regulation 455/09 (July 1, 2011)

Xylene (CAS 1330-20-7)

Precursor Control Regulations

Not regulated.

International regulations

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

Not applicable.

Montreal Protocol

Not applicable.

Basel Convention

Not applicable.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information

Issue date 11-13-2020

Version # 01

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. ITW Pro Brands cannot anticipate all conditions under which this information and its product, or the products of other manufacturers in combination with its product, may be used. It is the user's responsibility to ensure safe conditions for handling, storage and disposal of the product, and to assume liability for loss, injury, damage or expense due to improper use.