

SAFETY DATA SHEET

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND THE COMPANY/UNDERTAKING

Product name: **Dye Penetrant Developer**
 Supplier: MMP-International, Division
 of ITW Ltd.
 Brunel Close, Park Farm
 Ind Est,
 Wellingborough, Northants,
 NN8 6QX

Emergency telephone number: +44 (0) 1933 670870
 Fax No: +44 (0) 1933 670800

2. COMPOSITION/INFORMATION ON INGREDIENTS

Identification of the preparation

Chemical Name	CAS-No	EEC-No	Class	Weight %
BUTANE	106-97-8	601-004-00-0	F+; R12	5-10
HEPTANE	142-82-5	601-008-00-2	F; R11	10-30
PROPANE	74-98-6	601-003-00-5	F+; R12	10-30
HEXANE {MIXTURE OF ISOMERS (CONTAINING A MAXIMUM OF 5% N-HEXANE 601-037-00-0)}		601-007-00-7	F; R11	5-10

3. HAZARDS IDENTIFICATION

Most important hazards: Extremely flammable.
 Specific hazards Irritating to skin.

4. FIRST AID MEASURES

Inhalation: Move to fresh air, Consult a physician after significant exposure.
 Skin contact: Remove immediately adhering matter. Wash off immediately with soap and plenty of water, If skin irritation persists, call a physician.
 Eye contact: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
 Ingestion: Call a physician immediately, Do not induce vomiting.

5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: alcohol-resistant foam, Carbon Dioxide (CO₂), dry powder, Water spray.
 Specific hazards: In case of fire and/or explosion do not breathe fumes.
 Special protective equipment for firefighters: In case of fire, wear a self contained breathing apparatus, protective suit.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Do not breath vapours or spray mist.
 Environmental precautions: Do not let product enter drains.
 Methods for cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Transfer to covered steel drums.

7. HANDLING AND STORAGE

Handling: Use only in well-ventilated areas. Keep away from heat and sources of ignition.

Product name: **Dye Penetrant Developer**

REF: T9

Storage: Keep containers tightly closed in a cool, well-ventilated place. Keep away from sources of ignition - No smoking.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Chemical Name: National occupational exposure limits (Ref: British COSHH - EH40):

BUTANE	600ppm
HEPTANE	500ppm
PROPANE	Asphyxiant.
HEXANE (MIXTURE OF ISOMERS (CONTAINING A MAXIMUM OF 5% N-HEXANE 601-037-00-0))	

Engineering measures to reduce exposure: Ensure adequate ventilation, especially in confined areas..

- Respiratory protection: Breathing apparatus with filter.
- Hand protection: gloves 9 (Advice should be sought on the type of gloves) .
- Eye protection: safety glasses.
- Skin and body protection: protective suit.

Hygiene measures:

9. PHYSICAL AND CHEMICAL PROPERTIES

Form:	liquid - aerosol	Colour:	white	Odour:	hydrocarbon-like
pH:	g/l H ₂ O	N/A			
Boiling point/range:		71	°C		
Flash point:		-40	°C		
Autoignition temperature:		>250	°C		
Flammability (solid, gas):		LEL 0.8 (% vol in air at 25°C), UEL 9.0			
Explosive properties:		None			
Oxidizing properties:		None			
Vapour pressure:		2.41 Bar			

10. STABILITY AND REACTIVITY

Stability: Stable

Conditions to avoid: Keep away from heat and sources of ignition.

Materials to avoid: oxidizing agents, strong acids, strong bases.

Hazardous decomposition products: Carbon monoxide, Carbon Dioxide (CO₂), nitrogen oxides (NO_x).

11. TOXICOLOGICAL INFORMATION

Acute toxicity: Components of the product may be absorbed into the body by inhalation, ingestion and through the skin.
Aliphatic Hydrocarbon Solvent Blend: LD50/oral/rat = >5g/kg

Local effects: May be harmful by inhalation, ingestion, skin adsorption. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

Sensitization: May cause skin irritation and/or dermatitis.

Long term toxicity: Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

Repeated or prolonged exposure: Danger of serious damage to health by prolonged exposure, to the renal / Central nervous system.

12. ECOLOGICAL INFORMATION

Mobility: Do not allow material to contaminate ground water system.
Persistence / degradability: Aquatic toxicity is unlikely due to low solubility.

13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products:

Contaminated packaging: Empty containers can be landfilled after cleaning, when in compliance with local regulations.

European waste Catalogue No: **08 04 99**

14. TRANSPORT INFORMATION

Proper shipping name:	Aerosol		
UN-No:	1950		
ADR/RID Class:	2		
		HI/UN No:	1950
IMO Class:	2		
EmS:	2-13		
Proper shipping name:	Aerosol		
ICAO Class:	2	UN/ID No:	1950
Proper shipping name:	Aerosol		

15. REGULATORY INFORMATION

Classification according to European directive on classification of hazardous preparations 93/21/EEC

- Contains: PROPANE, BUTANE, HEXANE {MIXTURE OF ISOMERS (CONTAINING A MAXIMUM OF 5% N-HEXANE 601-037-00-0)}
- Symbol(s):



F+ -
Extremely
flammable



Xi - Irritant

R -phrase(s): R12 - Extremely flammable. R38 - Irritating to skin.

S -phrase(s): S2 - Keep out of reach of children.. S 9 - Keep container in a well-ventilated place.
S16 - Keep away from sources of ignition - No smoking.. S23 - Do not breathe. S29 - Do not empty into drains. S33 - Take precautionary measures against static discharges

16. OTHER INFORMATION

Recommended use:

Recommended restrictions:

When used in a mixture, read the labels and safety data sheets of all components.

Revision date: 09/07/2002
