



SAFETY DATA SHEET
FLEXANE HIGH PERFORMANCE BRUSHABLE HARDENER

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

1.1. Product identifier

Product name FLEXANE HIGH PERFORMANCE BRUSHABLE HARDENER
Product number X0104

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

Identified uses Hardener.

1.3. Details of the supplier of the safety data sheet

Supplier

ITW Performance Polymers
 Bay 150
 Shannon Industrial Estate
 Co. Clare
 Ireland
 V14 DF82
 353(61)771500
 353(61)471285
 mail@itwpp.com

1.4. Emergency telephone number

Emergency telephone +44(0)1235 239 670 (24h)

SECTION 2: Hazards identification

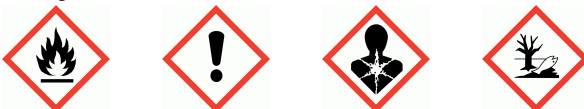
2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Physical hazards Flam. Liq. 3 - H226
Health hazards Eye Irrit. 2 - H319 STOT RE 2 - H373
Environmental hazards Aquatic Chronic 2 - H411

2.2. Label elements

Pictogram



Signal word

Warning

Hazard statements

H226 Flammable liquid and vapour.
 H319 Causes serious eye irritation.
 H373 May cause damage to organs through prolonged or repeated exposure.
 H411 Toxic to aquatic life with long lasting effects.

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Precautionary statements	<p>P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.</p> <p>P260 Do not breathe vapour/ spray.</p> <p>P273 Avoid release to the environment.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P314 Get medical advice/ attention if you feel unwell.</p>
Contains	DIETHYLMETHYLBENZENEDIAMINE
Supplementary precautionary statements	<p>P233 Keep container tightly closed.</p> <p>P240 Ground/ bond container and receiving equipment.</p> <p>P241 Use explosion-proof electrical equipment.</p> <p>P242 Use only non-sparking tools.</p> <p>P243 Take precautionary measures against static discharge.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.</p> <p>P337+P313 If eye irritation persists: Get medical advice/ attention.</p> <p>P370+P378 In case of fire: Use foam, carbon dioxide, dry powder or water fog to extinguish.</p> <p>P391 Collect spillage.</p> <p>P403+P235 Store in a well-ventilated place. Keep cool.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>

2.3. Other hazards

This product does not contain any substances classified as PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

2-METHOXY-1-METHYLETHYL ACETATE	60-100%
CAS number: 108-65-6	EC number: 203-603-9
Classification	
Flam. Liq. 3 - H226	
DIETHYLMETHYLBENZENEDIAMINE	10-30%
CAS number: 68479-98-1	EC number: 270-877-4
M factor (Acute) = 1	M factor (Chronic) = 1
Classification	
Acute Tox. 4 - H302	
Acute Tox. 4 - H312	
Eye Irrit. 2 - H319	
STOT RE 2 - H373	
Aquatic Acute 1 - H400	
Aquatic Chronic 1 - H410	

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CARBON BLACK	1-5%
CAS number: 1333-86-4	
Classification	
Not Classified	

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information	Avoid contact with skin and eyes. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
Inhalation	Move affected person to fresh air at once. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen. Get medical attention if any discomfort continues.
Ingestion	Rinse mouth thoroughly with water. Get medical attention immediately. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. Do not induce vomiting.
Skin contact	Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation persists after washing.
Eye contact	Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention. Get medical attention if irritation persists after washing.

4.2. Most important symptoms and effects, both acute and delayed

General information	The severity of the symptoms described will vary dependent on the concentration and the length of exposure.
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4.3. Indication of any immediate medical attention and special treatment needed

Notes for the doctor	No specific recommendations. If in doubt, get medical attention promptly.
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SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	Extinguish with the following media: Water. Carbon dioxide (CO ₂). Dry chemicals. Foam.
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5.2. Special hazards arising from the substance or mixture

Specific hazards	Avoid breathing fire gases or vapours. The product is flammable. Vapours are heavier than air and may spread near ground and travel a considerable distance to a source of ignition and flash back. Containers can burst violently or explode when heated, due to excessive pressure build-up.
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5.3. Advice for firefighters

Protective actions during firefighting	Keep up-wind to avoid fumes. Control run-off water by containing and keeping it out of sewers and watercourses.
Special protective equipment for firefighters	Wear positive-pressure self-contained breathing apparatus (SCBA) and appropriate protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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Personal precautions Wear protective clothing as described in Section 8 of this safety data sheet. Provide adequate ventilation. Avoid contact with skin and eyes. No smoking, sparks, flames or other sources of ignition near spillage.

6.2. Environmental precautions

Environmental precautions Avoid or minimise the creation of any environmental contamination. Do not discharge into drains or watercourses or onto the ground. Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up Absorb spillage with non-combustible, absorbent material. Collect and place in suitable waste disposal containers and seal securely. Containers with collected spillage must be properly labelled with correct contents and hazard symbol.

6.4. Reference to other sections

Reference to other sections Wear protective clothing as described in Section 8 of this safety data sheet.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Usage precautions Use only in well-ventilated areas. Static electricity and formation of sparks must be prevented. Avoid inhalation of vapours/spray and contact with skin and eyes. Avoid contact with skin and eyes. Do not eat, drink or smoke when using the product. Good personal hygiene procedures should be implemented.

7.2. Conditions for safe storage, including any incompatibilities

Storage precautions Store in tightly-closed, original container in a dry, cool and well-ventilated place. Store away from incompatible materials (see Section 10).

7.3. Specific end use(s)

Specific end use(s) The identified uses for this product are detailed in Section 1.2.

SECTION 8: Exposure Controls/personal protection

8.1. Control parameters

Occupational exposure limits

2-METHOXY-1-METHYLETHYL ACETATE

Long-term exposure limit (8-hour TWA): WEL 50 ppm(Sk) 274 mg/m³(Sk)

Short-term exposure limit (15-minute): WEL 100 ppm(Sk) 548 mg/m³(Sk)

CARBON BLACK

Long-term exposure limit (8-hour TWA): 3.5 mg/m³

WEL = Workplace Exposure Limit

Ingredient comments WEL = Workplace Exposure Limits

8.2. Exposure controls

Protective equipment



Appropriate engineering controls

Provide adequate general and local exhaust ventilation.

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Eye/face protection	Eyewear complying with an approved standard should be worn if a risk assessment indicates eye contact is possible. Unless the assessment indicates a higher degree of protection is required, the following protection should be worn: Tight-fitting safety glasses. Personal protective equipment for eye and face protection should comply with European Standard EN166.
Hand protection	Use protective gloves. It is recommended that gloves are made of the following material: Neoprene. It is recommended that gloves are made of the following material: Nitrile rubber. To protect hands from chemicals, gloves should comply with European Standard EN374. The selected gloves should have a breakthrough time of at least 8 hours.
Other skin and body protection	Wear chemical protective suit.
Hygiene measures	Provide eyewash station and safety shower. Good personal hygiene procedures should be implemented. Wash hands and any other contaminated areas of the body with soap and water before leaving the work site. Do not eat, drink or smoke when using the product. Promptly remove any clothing that becomes wet or contaminated.
Respiratory protection	If ventilation is inadequate, suitable respiratory protection must be worn. Respirator selection must be based on exposure levels, the hazards of the product and the safe working limits of the selected respirator. Check that the respirator fits tightly and the filter is changed regularly. Wear a respirator fitted with the following cartridge: Organic vapour filter. Gas filter, type A2. Half mask and quarter mask respirators with replaceable filter cartridges should comply with European Standard EN140.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

Appearance	Viscous liquid.
Colour	Black.
Odour	Slight pungent.
pH	pH (concentrated solution): approx 7 @ 20 °C
Initial boiling point and range	>149°C @
Flash point	>45°C
Evaporation rate	<1 (butyl acetate =1)
Vapour pressure	4.9 mbar @ °C
Vapour density	>1
Relative density	1.06 @ 20 °C
Solubility(ies)	Slightly soluble in water.

9.2. Other information

Other information	Not available.
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SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity	Acids. Strong oxidising agents.
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10.2. Chemical stability

Stability	Stable at normal ambient temperatures and when used as recommended.
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10.3. Possibility of hazardous reactions

Possibility of hazardous reactions Will not polymerise.

10.4. Conditions to avoid

Conditions to avoid Avoid heat, flames and other sources of ignition. Static electricity and formation of sparks must be prevented.

10.5. Incompatible materials

Materials to avoid Avoid contact with the following materials: Acids. Oxidising agents.

10.6. Hazardous decomposition products

Hazardous decomposition products Fire or high temperatures create: Nitrous gases (NO_x). Oxides of the following substances: Carbon monoxide (CO). Carbon dioxide (CO₂). Vapours/gases/fumes of: Ammonia or amines. Aldehydes. Hydrogen cyanide (HCN).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity - oral

ATE oral (mg/kg) 243,902.0

Acute toxicity - dermal

ATE dermal (mg/kg) 536,585.0

Inhalation Irritating to respiratory system.

Ingestion Harmful if swallowed.

Skin contact Irritating to skin. May cause sensitisation or allergic reactions in sensitive individuals. Harmful in contact with skin.

Eye contact Irritating to eyes.

Acute and chronic health hazards May be absorbed through the skin.

Route of entry Inhalation Skin absorption Ingestion.

SECTION 12: Ecological Information

Ecotoxicity Avoid releasing into the environment. The product contains a substance which is toxic to aquatic organisms and which may cause long-term adverse effects in the aquatic environment.

12.1. Toxicity

Acute toxicity - fish LC₅₀, 96 hours: 161mg/l mg/l, Algae

Acute toxicity - aquatic invertebrates EC₅₀, 48 hours: 408mg/l mg/l, Daphnia magna

12.2. Persistence and degradability

Persistence and degradability There are no data on the degradability of this product.

12.3. Bioaccumulative potential

Bioaccumulative potential No data available on bioaccumulation.

12.4. Mobility in soil

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Mobility Do not discharge into drains or watercourses or onto the ground.

12.5. Results of PBT and vPvB assessment

Results of PBT and vPvB assessment This product does not contain any substances classified as PBT or vPvB.

12.6. Other adverse effects

Other adverse effects Not 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.

Disposal methods Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Waste class 08 04 99

SECTION 14: Transport information

General No other information known.

14.1. UN number

UN No. (ADR/RID) 1139

UN No. (IMDG) 1139

UN No. (ICAO) 1139

14.2. UN proper shipping name

Proper shipping name (ADR/RID) COATING SOLUTION

Proper shipping name (IMDG) COATING SOLUTION

Proper shipping name (ICAO) COATING SOLUTION

Proper shipping name (ADN) COATING SOLUTION

14.3. Transport hazard class(es)

ADR/RID class 3

ADR/RID label 3

IMDG class 3

ICAO class/division 3

Transport labels



14.4. Packing group

ADR/RID packing group III

IMDG packing group III

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ICAO packing group III

14.5. Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

14.6. Special precautions for user

EmS F-E, S-E

Emergency Action Code 3Y

Hazard Identification Number 30
(ADR/RID)

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code No information required.

SECTION 15: Regulatory information

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

EU legislation Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures (as amended).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision date 03/04/2018

Revision 13

Supersedes date 28/04/2016

Hazard statements in full

H226 Flammable liquid and vapour.
 H302 Harmful if swallowed.
 H312 Harmful in contact with skin.
 H319 Causes serious eye irritation.
 H373 May cause damage to organs through prolonged or repeated exposure.
 H400 Very toxic to aquatic life.
 H410 Very toxic to aquatic life with long lasting effects.
 H411 Toxic to aquatic life with long lasting effects.

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.