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For purchasing information visit:

[Manns Trade Extra Tough Pro Floor Varnish](#)



# MANN'S TRADE

## Safety Data Sheet

Manns Trade Extra Tough Pro Catalyst

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

#### 1.1. Product Identifier

Name	Manns Trade Extra Tough Pro Catalyst
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#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Product Use	Cross-linking agent
Name	Manns Trade Extra Tough Pro Catalyst

#### 1.3. Details of the supplier of the safety data sheet

Company	Wood Finishes Direct LTD
Address	Unit B, 5 Acre Trade Estate, Park Farm Road, Folkestone, KENT, CT19 5DS
Web	www.wood-finishes-direct.com
Telephone	+44 (0)1303 213838
Fax	+44 (0)844 815 4992
Email	wood@finishes-direct.com
Email address of the competent person	wood@finishes-direct.com

#### 1.4. Emergency telephone number

Emergency telephone number	+44 (0)1303 213838
Company	Wood Finishes Direct LTD 7am - 7pm Mon - Fri, 8am - 5pm Sat, 10am - 4pm Sun.

### 2. HAZARDS IDENTIFICATION


#### 2.1. Classification of the substance or mixture

Classification - EC 1272/2008	Physical: Not Classified Health: Acute Tox. 4 - H332; Skin Irrit. 2 - H315; Eye Dam. 1 - H318; Skin Sens. 1 - H317; STOT Single 3 - H335 Environmental: Aquatic Chronic 3
Classification - (1999/45)	Xn; R20. Xi; R36/37. R43. R52/53
Human Health	Splashes may cause serious eye damage. The liquid may irritate the skin. May cause allergic skin disorders in sensitive individuals.
Environment	The product contains a substance which is harmful to aquatic organism and which may cause long term adverse effects in the aquatic environment

#### 2.2. Label elements

Contains	3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate oligomers Hexamethylene diisocyanate oligomers, Isocyanurate
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# Manns Trade Extra Tough Pro Catalyst

Label In Accordance With (Ec) No. 1272/2008	
Hazard Statements	<p>H315 - Causes skin irritation.  H317 - May cause an allergic skin reaction.  H318 - Causes serious eye damage.  H332 - Harmful if inhaled.  H335 - May cause respiratory irritation.  H412 - Harmful to aquatic life with long lasting effects.</p>
Supplementary Precautionary Statements	<p>P261 - Avoid breathing/dust/fume/gas/mist/vapours/spray.  P264 - Wash ... thoroughly after handling.  P271 - Use only outdoors or in a well-ventilated area.  P272 - Contaminated work clothing should not be allowed out of the workplace.  P273 - Avoid release into the environment.  P280 - Wear protective gloves/protective clothing/eye protection/face protection  P302+352 - IF ON SKIN: Wash with plenty of soap and water.  P304+340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.  P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  P310 - Immediately call a POISON CENTER or doctor/physician.  P312 - Call a POISON CENTER or doctor/physician if you feel unwell.  P321 - Specific treatment (see ... on this label).  P332+P313 - If skin irritation occurs: Get medical advice/attention.  P333+P313 - If skin irritation or rash occurs: Get medical advice/attention.  P362 - Take off contaminated clothing and wash before reuse.  P363 - Wash contaminated clothing before reuse.  P403+233 - Store in a well-ventilated place. Keep container tightly closed.  P405 - Store locked up.  P501 - Dispose of contents/containers to...</p>

## 2.3. Other Hazards

## 3. COMPOSITION/INFORMATION ON INGREDIENTS

### 3.2. Mixtures

3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate CAS-No.: 4098-71-9	EC No.: 223-861-6	< 1%
Classification (EC 1272/2008) Acute Tox. 3 - H331 Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Resp. Sens. 1 - H334 Skin Sens. 1 - H317 STOT Single 3 - H335 Aquatic Chronic 2 - H411	Classification (67/548) T;R23 R42/43 Xi;R36/37/38 N;R51/53	
3-Isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate oligomers CAS-No.: 53880-05-0	EC No.: 931-312-3	10-30%
Classification (EC 1272/2008) Acute Tox. 4 - H332 Skin Sens. 1 - H317 STOT Single 3 - H335	Classification (67/548) Xn;R20. Xi;R37. R43.	

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Hexamethylene diisocyanate oligomers, Isocyanurate CAS-No.: 28182-81-2 EC No.: 931-274-8		30-60%
Classification (EC 1272/2008) Acute Tox. 4 - H332 Skin Sens. 1 - H317 STOT Single 3 - H335	Classification (67/548) Xn;R20. Xi;R37. R43.	
HEXAMETHYLENE-DI-ISOCYANATE CAS-No.: 822-06-0 EC No.: 212-485-8		<1%
Classification (EC 1272/2008) Acute Tox. 4 - H302 Acute Tox. 2 - H330 Skin Corr. 1C - H314 Resp. Sens. 1 - H334 Skin Sens. 1 - H317 STOT Single 3 - H335	Classification (67/548) T;R23 R42/43 Xi;R36/37/38	
N,N-DIMETHYLCYCLOHEXYLAMINE CAS-No.: 98-94-2 EC No.: 202-715-5		1-5%
Classification (EC 1272/2008) Flam. Liq. 3 - H226 Acute Tox. 3 - H301 Acute Tox. 3 - H311 Acute Tox. 2 - H330 Skin Corr. 1B - H314 Aquatic Chronic 2 - H411	Classification (67/548) T;R23/24/25. C;R34. N;R51/53. R10.	
POLYOXYETHYLENE TRIDECYL ETHER PHOSPHATE CAS-No.: 9046-01-9 EC No.: ...		5-10%
Classification (EC 1272/2008) Skin Irrit. 2 - H315 Eye Dam. 1 - H318 Aquatic Chronic 2 - H411	Classification (67/548) Xi;R41,R38. N;R51/53.	

The Full Text for all R-Phrases are Displayed in Section 16

## 4. FIRST AID MEASURES

### 4.1. Description of first aid measures

Inhalation	Move the exposed person to fresh air at once. Provide rest, warmth and fresh air. Get medical attention if any discomfort continues. Place unconscious person on the side in the recovery position and ensure breathing For breathing difficulties oxygen may be necessary.
Eye contact	Remove victim immediately from source of exposure. Make sure to remove any contact lenses from the eyes before rinsing. Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes and get medical attention.
Skin contact	Remove affected person from source of contamination. Get medical attention promptly if symptoms occur after washing. Remove contaminated clothing immediately and wash skin with soap and water. Wash off promptly and flush contaminated skin with water. Promptly remove clothing if soaked through and flush skin with water.
Ingestion	Get medical attention immediately! Rinse mouth thoroughly. Provide rest, warmth and fresh air. DO NOT INDUCE VOMITING! NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Provide fresh air, warmth and rest, preferably in comfortable upright sitting position.

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

General Information	The severity of the symptoms described will vary dependant of the concentration and the length of exposure.
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## Manns Trade Extra Tough Pro Catalyst

Inhalation	Delayed, often serious breathing problems.
Ingestion	May cause chemical burns in mouth and throat.
Skin Contact	Skin irritation. Allergic rash.
Eye Contact	May cause blurred vision and serious eye damage.

### 4.3. Indication of any immediate medical attention and special treatment needed

## 5. FIREFIGHTING MEASURES

### 5.1. Extinguishing media

	Fire can be extinguished using: Dry chemicals, sand, dolomite etc. Foam, carbon dioxide or dry powder.
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### 5.2. Special hazards arising from the substance or mixture

Hazardous Combustion Products	When heated, toxic and corrosive vapours/gases may be formed.
Specific Hazards	Closed containers can burst violently when heated, due to excess pressure build-up.

### 5.3. Advice for firefighters

Special Fire Fighting Procedures	Cool containers exposed to flames with water until well after the fire is out. Keep run-off water out of sewers and water sources. Dike for water control.
Protective Measures In Fire	Self contained breathing apparatus and full protective clothing must be worn in case of fire.

## 6. ACCIDENTAL RELEASE MEASURES

### 6.1. Personal precautions, protective equipment and emergency procedures

	Ensure suitable personal protection (including respiratory protection) during removal of spillages in a confined area.
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### 6.2. Environmental precautions

	Do not discharge into drains, water courses or onto the ground. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body.
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### 6.3. Methods and material for containment and cleaning up

	Wear necessary protective equipment. Flush spilled material into suitable retaining areas or container with large quantities of water. Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labelled container.
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### 6.4. Reference to other sections

## 7. HANDLING AND STORAGE

### 7.1. Precautions for safe handling

	Avoid spilling, skin and eye contact. Keep away from heat, sparks and open flame. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level. Do not eat, drink or smoke when using the product. Avoid inhalation of vapours/spray and contact with skin and eyes.
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### 7.2. Conditions for safe storage, including any incompatibilities

	Store in tightly closed original container in a dry, cool and well-ventilated place.
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### 7.3. Specific end use(s)

# Manns Trade Extra Tough Pro Catalyst

## 7.3. Specific end use(s)

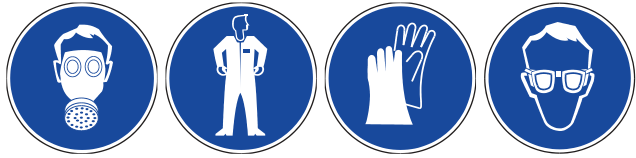
## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1. Control parameters

	STD	TWA - 8 hrs	STEL - 15 min	Notes
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	WEL	0.02 mg/m <sup>3</sup> (Sen)	0.07 mg/m <sup>3</sup> (Sen)	
HEXAMETHYLENE-DI-ISOCYANATE	WEL	0.02 mg/m <sup>3</sup> (Sen)	0.07 mg/m <sup>3</sup> (Sen)	

WEL = Workplace Exposure Limit.

### 8.2. Exposure controls

	
8.2.1. Appropriate engineering controls	Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded. Provide eyewash station.
Eye protection	Wear splash-proof eye goggles to prevent any possibility of eye contact.
Skin protection - Hand protection	Use protective gloves made of: Rubber, neoprene or PVC. For exposure of 4 to 8 hours use gloves made of: Viton rubber (fluor rubber).
Skin protection - Other	Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact.
Hygiene measures	Use appropriate skin cream to prevent drying of skin. Wash at the end of each work shift and before eating, smoking and using the toilet. Wash promptly with soap & water if skin becomes contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke. <b>DO NOT SMOKE IN WORK AREA!</b>

## 9. PHYSICAL AND CHEMICAL PROPERTIES

### 9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Colourless to pale yellow
Odour	Characteristic
Odour threshold	No data available
pH	No data available
Melting point	No data available
Initial boiling point	No data available
Flash point	76°C
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Vapour pressure	No data available
Vapour density	No data available
Relative density	1.08
Partition coefficient	No data available
Autoignition temperature	No data available
Viscosity	No data available
Explosive properties	No data available
Oxidising properties	No data available
Solubility	No data available

# Manns Trade Extra Tough Pro Catalyst

## 9.2. Other information

Conductivity	No data available
Surface tension	No data available
Gas group	No data available
Benzene Content	No data available
Lead content	No data available
VOC (Volatile organic compounds)	No data available

## 10. STABILITY AND REACTIVITY

### 10.1. Reactivity

### 10.2. Chemical stability

Stable under normal temperature conditions and recommended use.

### 10.3. Possibility of hazardous reactions

### 10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition. Avoid contact with strong oxidisers.

### 10.5. Incompatible materials

Materials To Avoid Strong oxidising substances. Strong acids.

### 10.6. Hazardous decomposition products

Fire creates: Acrid smoke/fumes of: Carbon monoxide (CO). Carbon dioxide (CO<sub>2</sub>).

## 11. TOXICOLOGICAL INFORMATION

### 11.1. Information on toxicological effects

Toxic Dose1 - Ld 50	3038 mg/kg (oral rat): Positive.
Germ Cell Mutagenicity (In Vivo)	Chromosome aberration: Positive.
Skin Contact	Risk of sensitisation or allergic reactions among sensitive individuals.
Eye Contact	Risk of serious damage to eyes.
Route of entry	Ingestion. Skin and/or eye contact.
Target Organs	Eyes Skin

## 12. ECOLOGICAL INFORMATION

<b>Ecotoxicity</b>	There are no data on the ecotoxicity of this product. The product contains a substance which is harmful to aquatic organisms and which may cause long term adverse effects in the aquatic environment.
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### 12.1. Toxicity

### 12.2. Persistence and degradability

### 12.3. Bioaccumulative potential

### 12.4. Mobility in soil

### 12.5. Results of PBT and vPvB assessment

### 12.6. Other adverse effects

# Manns Trade Extra Tough Pro Catalyst

## 13. DISPOSAL CONSIDERATIONS

General Information	When handling waste, consideration should be made to the safety precautions applying to handling of the product.
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### 13.1. Waste treatment methods

Disposal methods	Dispose of waste and residues in accordance with local authority requirements.
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## 14. TRANSPORT INFORMATION

Road transport notes	Not classified.
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Road transport notes	Not classified.
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Road transport notes	Not classified.
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Road transport notes	Not classified.
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### Hazard pictograms

#### 14.1. UN number

#### 14.2. UN proper shipping name

#### 14.3. Transport hazard class(es)

#### 14.4. Packing group

#### 14.5. Environmental hazards

#### 14.5. Special precautions for user

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

## 15. REGULATORY INFORMATION

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

Uk Regulatory References	The Control of Substances Hazardous to Health Regulations 2002 (S.I 2002 No. 2677) with amendments.
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Environmental Listing	No listing noted.
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Approved Code Of Practice	Classification and Labelling of Substances and Preparations Dangerous for Supply. Safety Data Sheets for Substances and Preparations.
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Guidance Notes	Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37. Isocyanates toxic hazards and precautions EH16.
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Eu Legislation	Dangerous Preparations Directive 1999/45/EC. Dangerous Substance Directive 67/548/EEC.
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### 15.2. Chemical safety assessment

	No chemical safety assessment has been carried out.
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## 16. OTHER INFORMATION

General Information	Only trained personnel should use this material.
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## Manns Trade Extra Tough Pro Catalyst

<b>Risk phrases in full</b>	<p>R10 Flammable.</p> <p>R20 Harmful by inhalation.</p> <p>R23 Toxic by inhalation.</p> <p>R23/24/25 Toxic by inhalation, in contact with skin and if swallowed.</p> <p>R34 Causes burns.</p> <p>R36/37/38 Irritating to eyes, respiratory system and skin.</p> <p>R37 Irritating to respiratory system.</p> <p>R38 Irritating to skin.</p> <p>R41 Risk of serious damage to eyes.</p> <p>R42/43 May cause sensitisation by inhalation and skin contact.</p> <p>R43 May cause sensitisation by skin contact.</p> <p>R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.</p>
<b>Hazard Statements In Full</b>	<p>H226 Flammable liquid and vapour.</p> <p>H301 Toxic if swallowed.</p> <p>H302 Harmful if swallowed.</p> <p>H311 Toxic in contact with skin.</p> <p>H314 Causes severe skin burns and eye damage.</p> <p>H315 Causes skin irritation.</p> <p>H317 May cause an allergic skin reaction.</p> <p>H318 Causes serious eye damage.</p> <p>H319 Causes serious eye irritation.</p> <p>H330 Fatal if inhaled.</p> <p>H331 Toxic if inhaled.</p> <p>H332 Harmful if inhaled.</p> <p>H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.</p> <p>H335 May cause respiratory irritation.</p> <p>H411 Toxic to aquatic life with long lasting effects.</p>
Disclaimer	<p>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.</p>