



SAFETY DATA SHEET

Issuing Date: 01-08-2015

Revision Date: 11-11-2014

Version 1

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

1.1.

Product identifier

Product Code(s) (ES): 70047153-M
Product Name HML 7153D
Product Registration number
Denmark -
Norway -
Sweden -
EC # Not Applicable
Pure substance/preparation

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

Recommended use Metalworking fluid: Lubricant

Uses advised against Any other purpose.

1.3. Details of the supplier of the safety data sheet

Manufacturer, Importer, Supplier

Houghton plc
Beacon Road
Trafford Park
Manchester
M17 1AF
Tel: +44 (0)161 874 5000
E-mail: MSDS@uk.houghtonglobal.com

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BP 60041
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Houghton Kimya San. A.Ş
Kosuyolu Mah
Asma Dall Sok
No: 1434718 Kadıköy
İstanbul
Türkiye
Phone Number: +90 216 325 15 15

1.4. Emergency telephone number

3E Company: (+)1 760 476 3961 (Code 333938)

Austria	Notfall-Telefonnummer +43 (0) 1 406 4343
Bulgaria	Телефон за спешни случаи +359 2 9154 409
Switzerland	145; +41 (0) 44 254 51 51
Czech Republic	Telefonní číslo pro naléhavé situace +420 224 919 293
Denmark	Ring til Giftlinjen på +45 82 12 12 12
Finland	Hätäpuhelinnumero +358 09 471 977
France	Numéro d'appel d'urgence +33 (0)1 45 42 5959
Hungary	Díjmentesen hívható zöld szám +36 80 20 11 99
Ireland	Emergency telephone number +353 01 809 2166
Netherlands	Telefoonnummer voor +31 30 274 88 88
Norway	Nødnummer +47 22 59 13 00
Poland	112
Portugal	Número de telefone de emergência +351 808 250 143
Romania	Număr de telefon care poate fi apelat în caz de urgență +021 318 36 06 (08:00-15:00)
Spain	Número de teléfono de emergencia +34 91 562 0420
Sweden	Telefonnummer för nödsituationer +46 08 33 12 31 (09:00-17:00)
Turkey	(+)1 760 476 3959 (Code 333938)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

This mixture is classified as not hazardous according to regulation (EC) 1272/2008 [GHS]

2.2. Label Elements

EUH210 - Safety data sheet available on request.

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1. Substances / 3.2. Mixtures

This product is a mixture. Health hazard information is based on its ingredients

Chemical Name	EC-No	CAS-No	Weight %	Classification (Reg. 1272/2008)	REACH Registration Number
2,2',2''-Nitrilotriethanol	203-049-8	102-71-6	2.5% - 10%	**	01-2119486482-31-xxx x
Neutralised Cyclohexylamine	203-629-0	108-91-8*	0% - 1%	Repr. 2 (H361f) Acute Tox. 3 (H301) Acute Tox. 3 (H311) Flam Liq. 3 (H226)	01-2119486803-29-xxx x

Full text of H- and EUH-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first-aid measures

General advice	Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. When symptoms persist or in all cases of doubt seek medical advice.
Inhalation	IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing. Get medical attention immediately if symptoms occur.
Skin contact	Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use.
Eye contact	Rinse thoroughly with plenty of water, also under the eyelids. Keep eye wide open while rinsing.
Ingestion	Clean mouth with water and afterwards drink plenty of water. Call a POISON CENTER or doctor/physician if exposed or you feel unwell.
Protection of First-aiders	Use personal protective equipment. Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

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

Main Symptoms None

4.3. Indication of immediate medical attention and special treatment needed

Notes to physician Treat symptomatically.

SECTION 5: FIRE FIGHTING MEASURES

5.1. Extinguishing media

Suitable Extinguishing Media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment: Use CO₂, dry chemical, or foam, Water spray or fog

Extinguishing media which shall not be used for safety reasons

None

5.2. Special hazards arising from the substance or mixture**Special Hazard**

Thermal decomposition can lead to release of irritating gases and vapors.

Hazardous Decomposition Products

None under normal use

5.3. Advice for firefighters**Special protective equipment for fire-fighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Keep people away from and upwind of spill/leak.

Advice for non-emergency personnel

Material can create slippery conditions.

Advice for emergency responders For personal protection see section 8.

6.2. Environmental precautions

Prevent further leakage or spillage if safe to do so. Do not flush into surface water or sanitary sewer system.

6.3. Methods and materials for containment and cleaning up

After cleaning, flush away traces with water.

6.4. Reference to other sections

See Section 8/12/13 for additional information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Ensure adequate ventilation. Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice.

7.2. Conditions for safe storage, including any incompatibilities**Technical measures/Storage conditions**

Keep container tightly closed in a dry and well-ventilated place.

Recommended Shelf Life

No information available.

Incompatible Materials

Strong oxidizing agents, Strong acids, Strong bases

7.3. Specific end uses

Specific use(s)

Metalworking fluid: Lubricant

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Chemical Name	European Union	United Kingdom	France	Spain
2,2',2''-Nitrilotriethanol				TWA: 5 mg/m ³
Neutralised Cyclohexylamine		STEL: 30 ppm STEL: 123 mg/m ³ TWA: 10 ppm TWA: 41 mg/m ³	VME: 10 ppm VME: 40 mg/m ³	TWA: 10 ppm TWA: 41 mg/m ³

Chemical Name	Germany	Italy	Portugal	The Netherlands
2,2',2''-Nitrilotriethanol	MAK: 5 mg/m ³ Ceiling / Peak: 20 mg/m ³		TWA: 5 mg/m ³	
Neutralised Cyclohexylamine	MAK: 2 ppm MAK: 8.2 mg/m ³ Ceiling / Peak: 4 ppm Ceiling / Peak: 16.4 mg/m ³		TWA: 10 ppm	

Chemical Name	Austria	Switzerland	Poland	Ireland
2,2',2''-Nitrilotriethanol	STEL 1.6 ppm STEL 10 mg/m ³ MAK: 0.8 ppm MAK: 5 mg/m ³			TWA: 5 mg/m ³
Neutralised Cyclohexylamine	Skin STEL 10 ppm STEL 40 mg/m ³ MAK: 10 ppm MAK: 40 mg/m ³ Ceiling 10 ppm Ceiling 40 mg/m ³	Skin STEL: 4 ppm STEL: 16.4 mg/m ³ MAK: 2 ppm MAK: 8.2 mg/m ³	NDSCh: 80 mg/m ³ NDS: 40 mg/m ³ Skin	TWA: 10 ppm TWA: 40 mg/m ³ Skin

Chemical Name	Finland	Denmark	Norway	Sweden
2,2',2''-Nitrilotriethanol	TWA: 5 ppm	TWA: 0.5 ppm TWA: 3.1 mg/m ³	TWA: 5 mg/m ³ STEL: 10 mg/m ³	LLV: 5 mg/m ³ STV: 10 mg/m ³
Neutralised Cyclohexylamine	TWA: 1 ppm TWA: 4.1 mg/m ³ STEL: 10 ppm STEL: 41 mg/m ³ Skin	TWA: 10 ppm TWA: 40 mg/m ³ Skin	TWA: 10 ppm TWA: 40 mg/m ³ Skin STEL: 20 ppm STEL: 60 mg/m ³	LLV: 5 ppm LLV: 20 mg/m ³ STV: 10 ppm STV: 40 mg/m ³

Chemical Name	Czech Republic	Hungary	Bulgaria	Romania
2,2',2''-Nitrilotriethanol	Ceiling: 10 mg/m ³ TWA: 5 mg/m ³		TWA: 3.0 mg/m ³	
Neutralised Cyclohexylamine	Ceiling: 40 mg/m ³ TWA: 20 mg/m ³ Skin	STEL: 40 mg/m ³ TWA: 40 mg/m ³	TWA: 20.0 mg/m ³	TWA: 5 ppm TWA: 20 mg/m ³ STEL: 10 ppm STEL: 40 mg/m ³

Workers Systemic toxicity

Chemical Name	Long term - Oral exposure	Long term - Dermal exposure	Long term - Inhalation exposure	Short term - Oral Exposure	Short term - Dermal exposure	Short term - Inhalation exposure
Neutralised Cyclohexylamine		0.4 mg/kg	5 mg/m ³		0.8 mg/kg	8.2 mg/m ³

Workers Local effects

Consumers Systemic toxicity

Chemical Name	Long term - Oral exposure	Long term - Dermal exposure	Long term - Inhalation exposure	Short term - Oral Exposure	Short term - Dermal exposure	Short term - Inhalation exposure
Neutralised Cyclohexylamine	0.2 mg/kg	0.2 mg/kg	0.6 mg/m ³	0.4 mg/kg	0.4 mg/kg	1.2 mg/m ³

Consumers Local effects**Predicted No Effect Concentration (PNEC)**

Chemical Name	Fresh water	Sea water	Fresh water sediment	Sea sediment	Soil
Neutralised Cyclohexylamine	0.032 mg/L	0.0032 mg/L	8.15 mg/kg	0.82 mg/kg	1.61 mg/kg

8.2. Exposure controls**Engineering Measures**

Ensure adequate ventilation, especially in confined areas.

Personal protective equipment**Eye Protection**

Safety glasses with side-shields.

Hand Protection

Protective gloves. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion. Barrier creams may help to protect the exposed areas of skin, they should however not be applied once exposure has occurred.

Skin and body protection

Long sleeved clothing.

Respiratory protection

No special protective equipment required. In case of mist, spray or aerosol exposure wear suitable personal respiratory protection and protective suit.

Hygiene measures

Do not eat, drink or smoke when using this product. Handle in accordance with good industrial hygiene and safety practice.

Environmental Exposure Controls

No special environmental precautions required.

Thermal hazards

None under normal use conditions

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties****Physical state @20°C**

liquid

Appearance

Dark brown

Odor

Mild

Odor Threshold

Not Applicable

PropertyValuesNote**pH**

9.0

Melting Point / Freezing Point

No information available.

Boiling point/boiling range

No information available.

Flash point

Not Applicable

Evaporation rate

No information available

Flammability (solid, gas)

No information available

Flammability Limits in Air**upper flammability limit**

No information available.

Lower flammability limit

No information available.

Vapor pressure

No information available.

Vapor density

No information available.

Relative density

1.07

@ 15.5°C

Solubility(ies)

Soluble in water

Partition coefficient: n-octanol/water

Not Applicable

Autoignition temperature

No information available

Decomposition temperature	No information available	
Viscosity, kinematic	4.6 cSt @ 40 °C	ISO 3104 ISO 3105
Explosive properties	Not Applicable	
Oxidizing Properties	Not Applicable	

9.2 Other information

Viscosity, kinematic (100°C)	No information available
Pour point	No information available
VOC Content	No information available

SECTION 10: Stability and reactivity**10.1. Reactivity**

None under normal use conditions.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

None under normal use conditions

10.4. Conditions to avoid

Do not freeze

10.5. Incompatible Materials

Strong oxidizing agents, Strong acids, Strong bases

10.6. Hazardous decomposition products

None under normal use conditions

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Product Information - Principle Routes of Exposure**

Inhalation	None known
Eye contact	None known
Skin contact	None known
Ingestion	None known

Acute toxicity - Product Information

Product does not present an acute toxicity hazard based on known information.

Acute toxicity - Component Information

Chemical Name	LD50 Oral (Rat)	LD50 Dermal (Rat/Rabbit)	LC50 Inhalation
2,2',2''-Nitrilotriethanol		> 16 mL/kg (Rat) > 2000 mg/kg (

Neutralised Cyclohexylamine	376 - 496 mg/kg (Rat)	Rabbit)	
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Skin corrosion/irritation	None known.
Serious eye damage/eye irritation	None known.
Sensitization	
Respiratory Sensitization	None known.
Skin sensitization	None known.
Germ Cell Mutagenicity	None known.
Carcinogenicity	None known.
Reproductive toxicity	May impair fertility. May cause harm to the unborn child. Contains a known or suspected reproductive toxin.
Specific target organ systemic toxicity (single exposure)	None known
Specific target organ systemic toxicity (repeated exposure)	None known.
Aspiration hazard	None known.

SECTION 12: Ecological information

12.1. Toxicity

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
2,2',2''-Nitrilotriethanol	216: 72 h Desmodesmus subspicatus mg/L EC50 169: 96 h Desmodesmus subspicatus mg/L EC50	10600-13000: 96 h Pimephales promelas mg/L LC50 flow-through 1000: 96 h Pimephales promelas mg/L LC50 static 450-1000: 96 h Lepomis macrochirus mg/L LC50 static		1386: 24 h Daphnia magna mg/L EC50
Neutralised Cyclohexylamine	20: 96 h Pseudokirchneriella subcapitata mg/L EC50 static 20: 96 h Pseudokirchneriella subcapitata mg/L EC50	44-90: 96 h Oncorhynchus mykiss mg/L LC50 470: 96 h Brachydanio rerio mg/L LC50 static		49: 24 h Daphnia magna mg/L EC50

12.2. Persistence and degradability

No information available.

12.3. Bioaccumulative potential

Chemical Name	log Pow
2,2',2''-Nitrilotriethanol	-2.53
Neutralised Cyclohexylamine	1.2

12.4. Mobility in soil

Miscible with water

12.5. Results of PBT and vPvB assessment

This preparation contains no substance considered to be persistent, bioaccumulating nor toxic (PBT). This preparation contains no substance considered to be very persistent nor very bioaccumulating (vPvB).

12.6. Other adverse effects

None known

SECTION 13: Disposal considerations
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13.1. Waste treatment methods**Waste from Residues / Unused Products**

Dispose of in accordance with local regulations

Contaminated packaging

Empty containers should be taken to an approved waste handling site for recycling or disposal. Observe all label precautions until container is cleaned, reconditioned or destroyed.

Other Data

According to the European Waste Catalogue, Waste Codes are not product specific, but application specific. Waste codes should be assigned by the user based on the application for which the product was used.

SECTION 14: Transport information
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14.1. UN-Number

Not regulated

14.2. UN proper shipping name

Not regulated

14.3. Transport hazard class

Not regulated

14.4. Packing group

Not regulated

14.5. Environmental Hazards

None.

14.6. Special precautions for users

None.

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

IMDG/IMO

Not regulated

ADR/RID

Not regulated

ICAO/IATA

Not regulated

SECTION 15: Regulatory information

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

The Classification, Labeling and Packaging of Substances and Mixtures (CLP) Regulation (EC 1272/2008)
Registration, Evaluation, Authorization, and Restriction of Chemicals (REACH) Regulation (EC 1907/2006)

Statutory Instruments: Control of Substances Hazardous to Health Regulations 2002. Chemicals (Hazard Information and Packaging) Regulations 2009.

Acts of Parliament: The Health and Safety at Work etc. Act 1974. Environment Protection Act 1990.

Regulation on classification, labeling, of hazardous chemicals (2002 changing 2005). Appendix VI to Regulation on classification, labeling etc. of hazardous chemicals (2002 changing 2010), list of hazardous substances (as amended). Guidelines for submission and declaration of hazardous waste (2009). Transport of dangerous goods: ADR, RID, IMDG and IATA. Administrative norms for pollution of the atmosphere, 2009.

Workplace exposure limits (EH40)

WGK Classification

Hazard to water/Class 2

15.2. Chemical Safety Assessment

No information available.

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Repr.-Reproduction toxicity

Asp. Tox. - Aspiration Toxicity

Acute Tox. - Acute Toxicity

Aquatic Acute - Acute Aquatic Toxicity

Aquatic Chronic - Chronic Aquatic Toxicity

Eye Dam. - Eye Damage

Eye Irrit. - Eye Irritation

Skin Corr. - Skin Corrosion

Skin Irrit. - Skin Irritation

Skin Sens. - Skin Sensitizer

Resp. Sens. - Respiratory Sensitizer

STOT SE - Specific target organ systemic toxicity (Single exposure)

STOT RE - Specific target organ systemic toxicity (repeated exposure)

VOC - Volatile organic compounds

Full text of H-Statements referred to under sections 2 and 3

<ul style="list-style-type: none"> • H224 - Extremely flammable liquid and vapor • H225 - Highly flammable liquid and vapor • H226 - Flammable liquid and vapor • H270 - May cause or intensify fire; oxidizer • H271 - May cause fire or explosion; strong oxidizer • H272 - May intensify fire; oxidizer • H290 - May be corrosive to metals • H300 - Fatal if swallowed • H301 - Toxic if swallowed • H302 - Harmful if swallowed • H304 - May be fatal if swallowed and enters airways • H310 - Fatal in contact with skin • H311 - Toxic in contact with skin • H312 - Harmful in contact with skin • H314 - Causes severe skin burns and eye damage • H315 - Causes skin irritation • H317 - May cause an allergic skin reaction • H318 - Causes serious eye damage • H319 - Causes serious eye irritation • H330 - Fatal if inhaled • H331 - Toxic if inhaled • H332 - Harmful if inhaled • H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled • H335 - May cause respiratory irritation • H336 - May cause drowsiness or dizziness • H340 - May cause genetic defects 	<ul style="list-style-type: none"> • H341 - Suspected of causing genetic defects • H350 - May cause cancer • H351 - Suspected of causing cancer • H360 - May damage fertility or the unborn child • H361 - Suspected of damaging fertility or the unborn child • H362 - May cause harm to breast-fed children • H370 - Causes damage to organs • H371 - May cause damage to organs • H372 - Causes damage to organs through prolonged or repeated exposure • 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 • H412 - Harmful to aquatic life with long lasting effects • H413 - May cause long lasting harmful effects to aquatic life. • H360Df - May damage the unborn child. Suspected of damaging fertility • H360D - May damage the unborn child • H360FD - May damage fertility. May damage the unborn child • H360F - May damage fertility • H361d - Suspected of damaging the unborn child • H361fd - Suspected of damaging fertility. Suspected of damaging the unborn child • H361f - Suspected of damaging fertility • EUH066 - Repeated exposure may cause skin dryness or cracking • EUH210 - Safety data sheet available on request. • EUH208 - May produce an allergic reaction
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Exposure scenario

No information available.

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Revision Note**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.