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

#### **1.1 Product identifier**

Trade name	: ト	HYDROFAN LIME GREEN
Product code	: L	_NHF0178

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

Use of the Substance/Mixture	:	Paints, varnishes and enamels
Chemical nature	:	Mono compound enamel - finish coat

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

Company	:	Lechler SpA
		Via Cecilio 17
		22100 Como- CO-
Telephone	:	+39031586111
Telefax	:	+39031586206
E-mail address	:	safety@lechler.eu
Responsible/issuing person		

#### **1.4 Emergency telephone number**

Tel. +39-031-586301 - This telephone number is available during office hours only. (8.00-18.00)

#### **SECTION 2: Hazards identification**

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

Classification (REGULATION (EC) No 1272/2008)

Skin sensitisation, Category 1 H317: May cause an allergic skin reaction.

2.2 Label elements

#### Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms



: H317

Signal word	:	Warning

Hazard statements

May cause an allergic skin reaction.

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Precautionary statements :	Prevention:	
	P261	Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
	P272	Contaminated work clothing should not be allowed out of the workplace.
	P280	Wear protective gloves.
	Response:	
	P333 + P313	If skin irritation or rash occurs: Get medical advice/ attention.
	P362 + P364	Take off contaminated clothing and wash it before reuse.
	Disposal:	
	P501	Dispose of contents/ container to an approved waste disposal plant.

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Hazardous components which must be listed on the label:

- 2682-20-4 2-methylisothiazol-3(2H)-one
- 55965-84-9 reaction mass of 5-chloro-2-methyl-2H-isothiazol-3-one and 2-methyl-2H-isothiazol-3-one (3:1)

#### 2.3 Other hazards

None known. The information required is contained in this Material Safety Data Sheet.

### **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures

Chemical nature

: Water pigmented dispersion

#### Hazardous components

Chemical name	CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
2-butoxyethanol	111-76-2 203-905-0 01-2119475108-36	Acute Tox. 4; H302 Acute Tox. 4; H332 Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Irrit. 2; H319	>= 1 - < 10
N-methyl-2-pyrrolidone	872-50-4 212-828-1 01-2119472430-46	Skin Irrit. 2; H315 Eye Irrit. 2; H319 Repr. 1B; H360D STOT SE 3; H335 ***	>= 0,1 - < 0,3
2-methylisothiazol- 3(2H)-one	2682-20-4 220-239-6	Acute Tox. 3; H301 Acute Tox. 2; H330	>= 0,0015 - < 0,0025

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		Acute Tox. 3; H311 Skin Corr. 1B; H314 Eye Dam. 1; H318 Skin Sens. 1A; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 (Acute M=10) (Chronic M=1)	
reaction mass of 5- chloro-2-methyl-2H- isothiazol-3-one and 2- methyl-2H-isothiazol-3- one (3:1)	55965-84-9	Acute Tox. 3; H301 Acute Tox. 2; H330 Acute Tox. 2; H310 Skin Corr. 1C; H314 Eye Dam. 1; H318 Skin Sens. 1A; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 (Acute M=100) (Chronic M=100)	<= 0,0002

For the full text of the H-Statements mentioned in this Section, see Section 16.

## **SECTION 4: First aid measures**

### 4.1 Description of first aid measures

General advice	:	When symptoms persist or in all cases of doubt seek medical advice. Never give anything by mouth to an unconscious person.
If inhaled	:	Remove to fresh air. Keep patient warm and at rest. If breathing is irregular or stopped, administer artificial respiration. If unconscious, place in recovery position and seek medical advice.
In case of skin contact	:	Take off all contaminated clothing immediately. Wash skin thoroughly with soap and water or use recognized skin cleanser. Do NOT use solvents or thinners. Put shower on working place
In case of eye contact	:	Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart. Seek medical advice. Put eye-washer on working place Remove contact lenses.
If swallowed	:	If accidentally swallowed obtain immediate medical attention. Do NOT induce vomiting. Keep at rest.

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

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Risks	: No information available.	
4.3 Indication of any immediate med	lical attention and special treatment needed	I
Treatment	: The first aid procedure should be estal with the doctor responsible for industri Seek medical advice.	
SECTION 5: Firefighting meas	sures	
5.1 Extinguishing media		
Suitable extinguishing media	: Use water spray, alcohol-resistant foar carbon dioxide. Keep containers and surroundings coo	-
Unsuitable extinguishing media	: Do NOT use water jet.	
5.2 Special hazards arising from t	he substance or mixture	
Specific hazards during firefighting	<ul> <li>As the product contains combustible o will produce dense black smoke conta products of combustion (see section 1 Exposure to decomposition products n health.</li> <li>Cool closed containers exposed to fire Collect contaminated fire extinguishing must not be discharged into drains.</li> <li>Fire residues and contaminated fire ex be disposed of in accordance with local</li> </ul>	ining hazardous 0). nay be a hazard to with water spray. y water separately. This ttinguishing water must
5.3 Advice for firefighters		
Special protective equipment for firefighters	: Wear self-contained breathing apparat necessary.	us for firefighting if
SECTION & Assidental values		

# SECTION 6: Accidental release measures

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

Personal precautions	<ul> <li>Use personal protective equipment.</li> <li>Ventilate the area.</li> <li>Refer to protective measures listed in sections 7 and 8.</li> <li>Material can create slippery conditions.</li> </ul>
6.2 Environmental precautions	
Environmental precautions	: Try to prevent the material from entering drains or water

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#### 6.3 Methods and materials for containment and cleaning up

Methods for cleaning up

: Clean with detergents. Avoid solvents. Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

#### 6.4 Reference to other sections

Refer to section 15 for specific national regulation.

### **SECTION 7: Handling and storage**

### 7.1 Precautions for safe handling

Advice on safe handling :	: Avoid exceeding the given occupational exposure limits (see section 8).
	Use only in area provided with appropriate exhaust ventilation. Avoid contact with skin, eyes and clothing.
	Smoking, eating and drinking should be prohibited in the
	application area.
	Avoid inhalation of vapour or mist.
	For personal protection see section 8.
	Thoroughly mix before using
	After using, store in a well-sealed container

#### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers	<ul> <li>Observe label precautions. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in accordance with the particular national regulations. Store between 5° an 35°C in a dry, well ventilated place awa from source of heat, ignition and direct sunlight. No smoking. Electrical installations / working materials must comply with the technological safety standards.</li> </ul>	
Advice on common storage	: Keep away from oxidizing agents and strongly acid or alkaline materials.	
German storage class	: 10 Combustible liquids	
7.3 Specific end use(s)		
	: This information is not available.	

### **SECTION 8: Exposure controls/personal protection**

### 8.1 Control parameters

Components CAS-No. Value Control Updat	e Basis
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				parameters		
2-	111	1-76-2	TWA	20 ppm	2000-06-16	2000/39/EC
butoxyethanol				98 mg/m3		
Further information	:	skin: Identif	fies the poss	ibility of significant upta	ake through the skinIn	dicative
			STEL	50 ppm 246 mg/m3	2000-06-16	2000/39/EC
Further information	:	skin: Identii	fies the poss	ibility of significant upta	ake through the skinIn	dicative
1-methyl-2- pyrrolidone	872	2-50-4	TWA	10 ppm 40 mg/m3	2009-12-19	2009/161/EU
Further information	:	skin: Identif	fies the poss	ibility of significant upta	ake through the skinIn	dicative
			STEL	20 ppm 80 mg/m3	2009-12-19	2009/161/EU
Further information	:	skin: Identif	fies the poss	ibility of significant upta	ake through the skinIn	dicative

DNEL N-methyl-2-pyrrolidone	: End Use: Workers Exposure routes: Dermal Potential health effects: Long-term systemic effects Value: 4,8 mg/kg
	End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term systemic effects Value: 14,4 mg/m3
	End Use: Workers Exposure routes: Inhalation Potential health effects: Long-term local effects Value: 40 mg/m3
PNEC N-methyl-2-pyrrolidone	: Fresh water Value: 0,25 mg/l
	Marine water Value: 0,025 mg/l
	Fresh water sediment Value: 1,42 mg/kg
	Marine sediment Value: 0,142 mg/kg
	Soil Value: 0,138 mg/kg
	Sewage treatment plant Value: 10 mg/kg

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#### 8.2 Exposure controls

Personal protective equipment	
Respiratory protection	<ul> <li>Apply technical measures to comply with the occupational exposure limits.</li> <li>This should be achieved by a good general extraction and -if practically feasible- by the use of a local exhaust ventilation. If the occupational exposure limits cannot be met, in exceptional cases suitable respiratory equipment should be worn only for a short period of time.</li> <li>Respirator with combination filter for vapour/particulate (EN 141)</li> </ul>
Hand protection	<ul> <li>Latex gloves</li> <li>For prolonged or repeated contact use protective gloves. Protective gloves complying with EN 374.</li> <li>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, and the contact time. If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves. Barrier creams may help to protect the exposed areas of skin, they should however not be applied once exposure has occurred.</li> <li>Skin should be washed after contact. Wash your hands and put on barrier creams</li> </ul>
Eye protection	: Chemical resistant goggles must be worn. Ensure that eyewash stations and safety showers are close to the workstation location.
Skin and body protection	: Skin should be washed after contact. Wear suitable protective clothing.
Environmental exposure controls	8
General advice	<ul> <li>Try to prevent the material from entering drains or water courses.</li> <li>If the product contaminates rivers and lakes or drains inform respective authorities.</li> </ul>

## **SECTION 9: Physical and chemical properties**

### 9.1 Information on basic physical and chemical properties

Appearance	: liquid
Odour	: solvent-like
Flash point	: > 63 - 100 °C

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Ignition temperature	: not determined	
Lower explosion limit	: No data available	
Upper explosion limit	: No data available	
Auto-ignition temperature	: Not applicable	
рН	: not determined	
Freezing point	: Not applicable	
Boiling point	: not determined	
Vapour pressure	: 1,000 hPa at 50 °C	
Density	: 1,0463 g/cm3	
Water solubility	: not determined	
Partition coefficient: n- octanol/water	: No data available	
Solubility in other solvents	: not determined	
Flow time	: 59 s 6 mm Method: ISO/DIN 2431 '84	
Relative vapour density	: Not applicable	
Evaporation rate	: not determined	
9.2 Other information		
Solids by weight	: 20,35 %	
Volatile organic compounds	: 6,01 %	

## **SECTION 10: Stability and reactivity**

: 73,63 %

#### 10.1 Reactivity

None reasonably foreseeable.

#### 10.2 Chemical stability

(VOC) content Water content

The product is chemically stable.

#### 10.3 Possibility of hazardous reactions

Hazardous reactions : No dangerous reaction known under conditions of normal use.

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10.4 Conditions to avoid				
Conditions to avoid	<ul> <li>Our products were manufactured in compliance with safety standards to avoid decomposition and degrading under the defined conditions.</li> <li>Taking the product type into account, it is advisable to leave the product in its original packaging thus avoiding transferring it.</li> </ul>			
10.5 Incompatible materials				
Materials to avoid	: Keep away from oxidizing agents, stron strongly acid materials in order to avoid	•••		
10.6 Hazardous decomposition products				
Hazardous decomposition products	: Carbon dioxide (CO2), carbon monoxic nitrogen (NOx), dense black smoke.	de (CO), oxides of		
Thermal decomposition	: Not applicable			

# **SECTION 11: Toxicological information**

### 11.1 Information on toxicological effects

Product		
Acute oral toxicity	:	Acute toxicity estimate: > 2.000 mg/kg, Calculation method
Acute inhalation toxicity	:	Acute toxicity estimate: > 20 mg/l, 4 h, vapour, Calculation method
Acute dermal toxicity	:	Acute toxicity estimate: > 2.000 mg/kg, Calculation method
Skin corrosion/irritation	:	Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin resulting in desiccation of the skin., The product may be absorbed through the skin.
Further information	:	The concentration of each substance should be borne in mind in assessing the toxicological effects deriving from the preparation.
Components:		
<b>N-methyl-2-pyrrolidone :</b> Acute oral toxicity	:	LD50: 4.150 mg/kg, Rat(male and female), OECD Test Guideline 401
Acute inhalation toxicity	:	LC50: > 5,1 mg/l, 4 h, Rat, OECD Test Guideline 403
Acute dermal toxicity	:	LD50: > 5.000 mg/kg, Rat, OECD Test Guideline 402

# **SECTION 12: Ecological information**

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12.1 Toxicity		
Toxicity to fish	: Remarks: No data is available on the product itself.	
Toxicity to fish N-methyl-2-pyrrolidone	: LC50: > 500 mg/l Exposure time: 96 h	
	Species: Oncorhynchus mykiss (rainbow	r trout)
2-methyl-2H-isothiazol-3-one 5-Chloro-2-methyl- 3(2H)isothiazolone mixt. with 2-Methyl-3(2H)isothiazolone	: 10 : 100	
	aquatic invertebrates (Chronic toxicity) : NOEC: 12,5 mg/l Exposure time: 21 d Species: Daphnia magna (Water flea) Method: OECD Test Guideline 211	
12.2 Persistence and degradability		
Biodegradability	: No data available	
12.3 Bioaccumulative potential		

: No data available

### 12.4 Mobility in soil

Bioaccumulation

Mobility : No data available

#### 12.5 Results of PBT and vPvB assessment

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

#### 12.6 Other adverse effects

Additional ecological	: The product contains dangerous substances for the
information	environment (see chapter no 3).
	The concentration of each substance should be borne in mind in assessing the toxicological effects deriving from the
	preparation.

#### **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

Product

: The product should not be allowed to enter drains, water courses or the soil.

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	Disposal together with normal waste is not allowed. Special disposal required according to local regulations.		
Contaminated packaging	: Empty containers should be taken to handling site for recycling or disposal According to the European Waste Ca are not product specific, but applicati The Waste code should be assigned the user, the producer and the waste The following Waste Codes are only	I. atalogue, Waste Codes ion specific. in discussion between disposal company.	

## **SECTION 14: Transport information**

#### 14.1 UN number

Not regulated as a dangerous good

### 14.2 Proper shipping name

## ADR

Not dangerous goods

### IMDG

Not dangerous goods

### IATA

Not dangerous goods

## 14.3 Transport hazard class(es)

Not regulated as a dangerous good

### 14.4 Packing group

Not regulated as a dangerous good

### 14.5 Environmental hazards

### ADR

Not dangerous goods

### IMDG

Not dangerous goods

## IATA

Not dangerous goods

### 14.6 Special precautions for user

Not applicable

**14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not applicable for product as supplied.

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## **SECTION 15: Regulatory information**

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

REACH - Candidate List of	: This product contains substances of very high concern
Substances of Very High	(Regulation (EC) No 1907/2006 (REACH), Article 57).
Concern for Authorisation	
(Article 59).	

872-50-4	N-methyl-2-pyrrolidone
REACH - List of substances subject to authorisation (Annex XIV)	: Not applicable
REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)	: 3
REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)	: Banned and/or restricted
872-50-4	N-methyl-2-pyrrolidone
Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import of dangerous chemicals	: Not applicable
MAL-Code-Number	: 1-3 (1993) 183-m3 air/10 g
Storage class (TRGS 510)	: 10: Combustible liquids
Risk classification according to VbF	: Flash Point > 55 °C up to 100 °C, at 15 °C not miscible with water
Water contaminating class (Germany)	<ul> <li>slightly hazardous to water</li> <li>Ordinance on facilities for handling substances that are hazardous to water (AwSV)</li> <li>Classification according to AwSV, Annex 1 (5.2)</li> </ul>

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This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006. Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

#### 15.2 Chemical safety assessment

No data is available on the product itself.

#### **SECTION 16: Other information**

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

H301	Toxic if swallowed.
H302	Harmful if swallowed.
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.
H332	Harmful if inhaled.
H335	May cause respiratory irritation.
H360D	May damage the unborn child.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.

#### List of references

Regulation of the European Parliament and Council Regulation (EC) No 1272/2008 on classification, labeling and packaging of substances and mixtures (CLP)

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC (Official Journal of the European Union L 396 from 30.12.2006, as amended). Regulation (EU) No 528/2012 of the European Parliament and of the Council of 22 May 2012 concerning the making available on the market and use of biocidal products This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

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

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ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road: AICS - Australian Inventory of Chemical Substances: ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN -Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx -Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS -Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx -Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP -Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO -International Civil Aviation Organization: IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC -No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID -Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

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.