

# Safety Data Sheet

## Nordflex H 0114



Safety Data Sheet dated 28/1/2014, version 1

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

#### 1.1. Product identifier

Mixture identification:  
Trade name: Nordflex H 0014  
Trade code: H 0014

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

Hardener for polyacrylic enamel for industrial use.  
Only for professional use.  
Not for autobody shop use.

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

Company:  
Ind. Chimica Reggiana I.C.R. Spa  
Via Gasparini, 7 42124 REGGIO EMILIA Italia  
Tel. +39 0522/517803 Fax +39 0522/514384

#### Competent person responsible for the safety data sheet:

sdsre@icrsprint.it

#### 1.4. Emergency telephone number

Tel. +39 0522-517803

### SECTION 2: Hazards identification

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

Directive criteria, 67/548/CE, 99/45/EC and following amendments thereof:





#### Properties / Symbols:

Xn Harmful  
Xi Irritant

#### R Phrases:

R10 Flammable.  
R20 Harmful by inhalation.  
R37 Irritating to respiratory system.  
R43 May cause sensitization by skin contact.  
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### EC regulation criteria 1272/2008 (CLP):

-  Warning, Flam. Liq. 3, Flammable liquid and vapour.
-  Warning, Acute Tox. 4, Harmful if inhaled.
-  Warning, STOT SE 3, May cause respiratory irritation.
-  Warning, Skin Sens. 1, 1A, 1B, May cause an allergic skin reaction.

Aquatic Chronic 3, Harmful to aquatic life with long lasting effects.

#### Adverse physicochemical, human health and environmental effects:

No other hazards

#### 2.2. Label elements

##### Symbols:

Xn Harmful

##### R Phrases:

R10 Flammable.  
R20 Harmful by inhalation.  
R37 Irritating to respiratory system.  
R43 May cause sensitization by skin contact.  
R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

##### S Phrases:

S23 Do not breathe spray  
S24/25 Avoid contact with skin and eyes.  
S3/7 Keep container tightly closed in a cool place.  
S37 Wear suitable gloves.  
S51 Use only in well-ventilated areas.  
S60 This material and its container must be disposed of as hazardous waste.

##### Contents:

Hexamethylene-1,6-di-isocyanate (homopolymer)

##### Special Provisions:

Contains isocyanates. See information supplied by the manufacturer.

##### Symbols:

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### Warning

#### Hazard statements:

H226 Flammable liquid and vapour.  
H332 Harmful if inhaled.  
H335 May cause respiratory irritation.  
H317 May cause an allergic skin reaction.  
H412 Harmful to aquatic life with long lasting effects.

#### Precautionary statements:

P260 Do not breathe vapours.  
P262 Do not get in eyes, on skin, or on clothing.  
P271 Use only outdoors or in a well-ventilated area.  
P273 Avoid release to the environment.  
P280 Wear protective gloves.  
P403+P233 Store in a well-ventilated place. Keep container tightly closed.

#### Special Provisions:

EUH204 Contains isocyanates. May produce an allergic reaction.

#### Contents:

Hexamethylene-1,6-di-isocyanate (homopolymer)

#### Special provisions according to Annex XVII of REACH and subsequent amendments:

None

#### 2.3. Other hazards

vPvB Substances: None - PBT Substances: None

#### Other Hazards:

No other hazards

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### SECTION 3: Composition/information on ingredients

#### 3.1. Substances

N.A.

#### 3.2. Mixtures

Hazardous components within the meaning of EEC directive 67/548 and CLP regulation and related classification:

##### 40% - 50% n-butyl acetate

REACH No.: 01-2119485493-29, Index number: 607-025-00-1, CAS: 123-86-4, EC: 204-658-1  
R10-66-67; substance with a Community workplace exposure limit



2.6/3 Flam. Liq. 3 H226



3.8/3 STOT SE 3 H336

##### 30% - 40% Hexamethylene-1,6-di-isocyanate (homopolymer)

REACH No.: 01-2119485796-17, CAS: 28182-81-2, EC: 500-060-2  
Xn,Xi; R20-37-43



3.4.2/1-1A-1B Skin Sens. 1, 1A, 1B H317

##### 10% - 12.5% 2-methoxy-1-methylethyl acetate

REACH No.: 01-2119475791-29, Index number: 607-195-00-7, CAS: 108-65-6, EC: 203-603-9  
R66-10; substance with a Community workplace exposure limit



2.6/3 Flam. Liq. 3 H226

##### 7% - 10% Xylene

REACH No.: 01-2119488216-32, Index number: 601-022-01-6, CAS: 1330-20-7, EC: 215-535-7  
Xn,Xi; R36/37/38-48/20-65-10-20/21



2.6/3 Flam. Liq. 3 H226



3.1/4/Inhal Acute Tox. 4 H332



3.1/4/Dermal Acute Tox. 4 H312



3.3/2 Eye Irrit. 2 H319



3.8/3 STOT SE 3 H335




3.2/2 Skin Irrit. 2 H315

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 3.9/2 STOT RE 2 H373

 3.10/1 Asp. Tox. 1 H304

0.5% - 1% ethylbenzene

REACH No.: 01-2119489370-35, Index number: 601-023-00-4, CAS: 100-41-4, EC: 202-849-4  
F,Xn; R11-20


 2.6/2 Flam. Liq. 2 H225

 3.1/4/Inhal Acute Tox. 4 H332

DECLJ\*


0.25% - 0.5% Tosyl isocyanate

Index number: 615-012-00-7, CAS: 4083-64-1, EC: 223-810-8  
Xn,Xi; R14-36/37/38-42

 3.3/2 Eye Irrit. 2 H319


 3.8/3 STOT SE 3 H335

 3.2/2 Skin Irrit. 2 H315


 3.4.1/1-1A-1B Resp. Sens. 1, 1A, 1B H334

0.25% - 0.5% Dibutyltin dilaurate


REACH No.: 01-2119496068-27, CAS: 77-58-7, EC: 201-039-8  
Repr. Cat. 3,T,Xi,C,N; R48/25-34-43-60-61-68-50/53

 3.1/4/Oral Acute Tox. 4 H302

 3.2/1C Skin Corr. 1C H314

 3.3/1 Eye Dam. 1 H318

 3.4.2/1-1A-1B Skin Sens. 1, 1A, 1B H317


 3.5/2 Muta. 2 H341

 3.7/1B Repr. 1B H360FD

 3.8/1 STOT SE 1 H370

 3.9/1 STOT RE 1 H372

 4.1/A1 Aquatic Acute 1 H400

 4.1/C1 Aquatic Chronic 1 H410

\*DECLJ: Substance classified accordingly to Note J of the Annex I of directive 67/548/EEC. The 'Carcinogenic' classification is not necessary if you can demonstrate that the substance contains less than 0.1% weight/weight of benzene

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

In case of eyes contact:

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

In case of Ingestion:

Do not under any circumstances induce vomiting. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

If breathing is irregular or stopped, administer artificial respiration.

In case of inhalation, consult a doctor immediately and show him packing or label.

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

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See section 11 for known symptoms and effects.

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

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### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

Suitable extinguishing media:

CO<sub>2</sub> or Dry chemical fire extinguisher.

Extinguishing media which must not be used for safety reasons:

Do not use water jets. Water may not be effective fire fighting measure, however it can be used to cool closed containers close to flames as to avoid bursting and exploding.

#### 5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke.

#### 5.3. Advice for firefighters

Use suitable breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

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### SECTION 6: Accidental release measures

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

Wear personal protection equipment.

Remove all sources of ignition.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Provide adequate ventilation.

Use appropriate respiratory protection.

See protective measures under point 7 and 8.

#### 6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, organic, sand

#### 6.3. Methods and material for containment and cleaning up

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.

#### 6.4. Reference to other sections

See also section 8 and 13

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### SECTION 7: Handling and storage

#### 7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Use localized ventilation system.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

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

Always keep the containers tightly closed.

Keep away from unguarded flame, sparks, and heat sources. Avoid direct exposure to sunlight.

Keep away from food, drink and feed.

Instructions as regards storage premises:

Cool and adequately ventilated.

#### 7.3. Specific end use(s)

See Point 1.2.

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### SECTION 8: Exposure controls/personal protection

#### 8.1. Control parameters

n-butyl acetate - CAS: 123-86-4

EU, 150 ppm, 200 ppm

2-methoxy-1-methylethyl acetate - CAS: 108-65-6

EU - LTE(8h): 275 mg/m<sup>3</sup>, 50 ppm - STE: 550 mg/m<sup>3</sup>, 100 ppm

ICR1 - LTE(8h): 275 mg/m<sup>3</sup>, 50 ppm - STE: 550 mg/m<sup>3</sup>, 100 ppm

Xylene - CAS: 1330-20-7

EU - LTE(8h): 221 mg/m<sup>3</sup>, 50 ppm - STE(): 442 mg/m<sup>3</sup>, 100 ppm - Notes: Assorbito attraverso la pelle

ACGIH - LTE(8h): 221 mg/m<sup>3</sup>, 50 ppm - STE(): 442 mg/m<sup>3</sup>, 100 ppm

ethylbenzene - CAS: 100-41-4

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ICR1 - LTE(8h): 442 mg/m<sup>3</sup>, 100 ppm - STE(): 884 mg/m<sup>3</sup>, 200 ppm - Notes: Pelle  
EU - LTE: 442 mg/m<sup>3</sup>, 100 ppm - STE: 884 mg/m<sup>3</sup>, 200 ppm

Dibutyltin dilaurate - CAS: 77-58-7

EU - LTE: 0.10 mg/m<sup>3</sup> - STE: 0.20 mg/m<sup>3</sup> - Notes: Pelle

### DNEL Exposure Limit Values

n-butyl acetate - CAS: 123-86-4

Consumer: 102.34 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, local effects

Worker Professional: 960 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

Worker Professional: 960 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Short Term, local effects

Worker Professional: 480 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Worker Professional: 480 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, local effects

Hexamethylene-1,6-di-isocyanate (homopolymer) - CAS: 28182-81-2

Worker Professional: 1 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Short Term, local effects

Worker Professional: 0.5 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, local effects

Xylene - CAS: 1330-20-7

Worker Professional: 289 mg/kg - Exposure: Human Inhalation - Frequency: Short Term, local effects

Worker Professional: 180 mg/kg - Consumer: 108 mg/kg - Exposure: Human Dermal - Frequency: Long

Term, systemic effects

Worker Professional: 77 mg/m<sup>3</sup> - Consumer: 14.8 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long

Term, local effects

Consumer: 1.6 mg/kg - Exposure: Human Oral - Frequency: Long Term, systemic effects

Dibutyltin dilaurate - CAS: 77-58-7

Worker Industry: 1 mg/kg - Consumer: 0.5 mg/kg - Exposure: Human Dermal - Frequency: Short Term, systemic effects - Notes: mg/kg bw

Worker Industry: 0.2 mg/kg - Consumer: 0.08 mg/kg - Exposure: Human Dermal - Frequency: Long Term, systemic effects - Notes: mg/kg bw/ day

Worker Industry: 0.07 mg/m<sup>3</sup> - Consumer: 0.02 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Short Term, systemic effects

Worker Industry: 0.01 mg/m<sup>3</sup> - Consumer: 0.003 mg/m<sup>3</sup> - Exposure: Human Inhalation - Frequency: Long Term, systemic effects

Consumer: 0.01 mg/kg - Exposure: Human Oral - Frequency: Short Term, systemic effects - Notes: mg/kg bw

### PNEC Exposure Limit Values

Hexamethylene-1,6-di-isocyanate (homopolymer) - CAS: 28182-81-2

Target: Fresh Water - Value: 0.127 mg/l

Target: Marine water - Value: 0.0127 mg/l

Target: Freshwater sediments - Value: 266700 mg/kg

Target: Soil - Value: 53182 mg/kg

Target: Purification plant - Value: 38.28 mg/l

Xylene - CAS: 1330-20-7

Target: STP - Value: 6.58 mg/l

Target: Marine water - Value: 0.327 mg/l

Target: Intermittent emissions - Value: 0.327 mg/l

Target: Freshwater sediments - Value: 12.46 mg/kg

Target: Marine water sediments - Value: 12.46 mg/kg

Target: Soil - Value: 2.31 mg/kg

Target: Fresh Water - Value: 0.327 mg/l

### 8.2. Exposure controls

Eye protection:

Use face-mask or close fitting safety goggles (e.g. EN166 F3). Do not wear contact lenses.

Protection for skin:

Wear safety clothing that ensure full skin protection in accordance to EN 14605 Type 4 in case of spills or spray (e.g. Tyrek). Please note: safety clothing must be changed immediately if it comes in contact with product.

Protection for hands:

Use protective gloves that provides comprehensive protection, EN374 Class 3 (B-F-I). Permeation time > 30 minutes; 0.4 mm thickness.

Respiratory protection:

Use adequate protective respiratory devices, using Filter "A" (Brown colour) for organic gas and vapors with boiling points over 65°C.

Thermal Hazards:

None

Environmental exposure controls:

Emissions from ventilation systems or from work processes must be check as to ensure compliance to environmental protection legislation. In some cases the addition of vapour scrubbers, filters or other system modification may be necessary in order to reduce emissions to acceptable levels.

## SECTION 9: Physical and chemical properties

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

Appearance and colour:	Transparent liquid
Odour:	Typical di solvente
Odour threshold:	N.D.
pH:	N.A. (organic solvent)

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Melting point / freezing point:	N.D.
Initial boiling point and boiling range:	126°C
Solid/gas flammability:	N.A.
Upper/lower flammability or explosive limits:	1,2% - 7,5% vol
Vapour density:	N.D.
Flash point:	25°C
Evaporation rate:	N.D.
Vapour pressure:	15 hPa
Relative density:	0,97 g/cm <sup>3</sup>
Solubility in water:	Insoluble
Solubility in oil:	N.D.
Auto-ignition temperature:	415°C
Decomposition temperature:	N.D.
Viscosity:	N.D.
Explosive properties:	N.D.
Oxidizing properties:	N.D.

### SECTION 10: Stability and reactivity

#### 10.1. Reactivity

Stable under normal conditions

#### 10.2. Chemical stability

Stable under recommended use and storage conditions (see point 7).

#### 10.3. Possibility of hazardous reactions

It may generate flammable gases on contact with elementary metals (alkalis and alkaline earth, alloys in powder or vapours) and powerful reducing agents.

It may generate toxic gases on contact with oxidising mineral acids, and powerful oxidising agents.

It may catch fire on contact with oxidising mineral acids, and powerful oxidising agents.

#### 10.4. Conditions to avoid

Avoid accumulating electrostatic charge.

#### 10.5. Incompatible materials

Avoid all contact with water or with moist air.

Avoid contact with combustible materials. The product could catch fire.

#### 10.6. Hazardous decomposition products

None.

### SECTION 11: Toxicological information

#### 11.1. Information on toxicological effects

Toxicological information of the mixture:

N.A.

Toxicological information of the main substances found in the mixture:

n-butyl acetate - CAS: 123-86-4

##### a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 6400 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit > 5000 mg/kg

Test: LC50 - Route: Inhalation - Species: Rat = 21.1 mg/l - Duration: 4h

Hexamethylene-1,6-di-isocyanate (homopolymer) - CAS: 28182-81-2

##### a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat > 2000 mg/kg

Test: LC50 - Route: Inhalation Mist - Species: Rat = 390 mg/m<sup>3</sup> - Duration: 4h

##### b) skin corrosion/irritation:

Test: Skin Irritant - Route: Skin - Species: Rabbit Positive - Notes: Debolamente irritante

##### d) respiratory or skin sensitisation:

Test: Skin Sensitization - Route: Skin - Species: GUINEA PIG Positive - Source: Maximation Test

2-methoxy-1-methylethyl acetate - CAS: 108-65-6

##### a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat = 35.7 mg/l

Test: LD50 - Route: Oral - Species: Rat = 8500 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit > 5000 mg/l

Xylene - CAS: 1330-20-7

##### a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Rat = 6350 Ppm - Duration: 4h

Test: LD50 - Route: Oral - Species: Rat = 3523 mg/kg

Test: LD50 - Route: Skin - Species: Rabbit = 4350 mg/kg

ethylbenzene - CAS: 100-41-4

##### a) acute toxicity:

Test: LC50 - Route: Inhalation - Species: Mouse = 35500 mg/m<sup>3</sup>

Test: LC50 - Route: Inhalation - Species: Rat = 55000 mg/m<sup>3</sup>

Test: LD50 - Route: Oral - Species: Rat = 3500 mg/kg

Tosyl isocyanate - CAS: 4083-64-1

##### a) acute toxicity:

Test: LD50 - Route: Oral - Species: Rat = 2234 mg/kg

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Test: LC50 - Route: Inhalation - Species: Rat = 640 Ppm - Duration: 1h  
Dibutyltin dilaurate - CAS: 77-58-7

a) acute toxicity:  
Test: LD50 - Route: Oral - Species: Rat = 2071 mg/kg  
Test: LD50 - Route: Skin - Species: Rabbit > 2000 mg/kg

c) serious eye damage/irritation:

Test: Eye Irritant Positive

e) germ cell mutagenicity:

Test: Mutagenesis Positive

n-butyl acetate - CAS: 123-86-4

OBSERVATIONS ON HUMAN SUBJECTS:

Inhalation: 3300 ppm (16 mg/l), for short periods, cause serious irritation to the eyes and to the nose.

Inhalation: 200-300 ppm (1-1.4 mg/l), for short periods, cause moderate irritation to the eyes and to the nose.  
Inhaling the vapours can irritate the respiratory system.

The vapours can cause headache and nausea. As a liquid it can irritate the eyes and cause conjunctivitis, it can irritate the skin and cause dermatitis and, if swallowed, causes inebriation, hallucinations and sedation.  
Symptoms of illness at 500 ppm. Serious toxic effects at 2,000 ppm for 60 min.

TCLo: 200 ppm

Xylene - CAS: 1330-20-7

OBSERVATIONS ON HUMAN SUBJECTS NON-PROFESSIONAL EXPOSURE - Effects following acute exposure:

Symptoms of intense exposure are: dermatitis, eczema, irritation to the eyes and to the respiratory tract.  
Inhaling the vapours can cause dizziness, headache, nausea, incoordination, excitability, narcosis, anaemia, and paraesthesia of the hands and feet.

PROFESSIONAL EXPOSURE - Effects following acute exposure:

Narcotic at high concentrations.

Irritation through inhalation at 200 ppm (TCLo). Inhalation of 200 ppm has irritating effects in human subjects.

Human subject (oral)(LDLo): 50 mg/kg.

Inhalatory human subject (LCLo) 10000 ppm/6h.

If not differently specified, the information required in Regulation 453/2010/EC listed below must be considered as N.A.:

- a) acute toxicity;
- b) skin corrosion/irritation;
- c) serious eye damage/irritation;
- d) respiratory or skin sensitisation;
- e) germ cell mutagenicity;
- f) carcinogenicity;
- g) reproductive toxicity;
- h) STOT-single exposure;
- i) STOT-repeated exposure;
- j) aspiration hazard.

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### SECTION 12: Ecological information

#### 12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Dibutyltin dilaurate - CAS: 77-58-7

a) Aquatic acute toxicity:

Endpoint: LC50 - Species: Fish = 3.1 mg/l

Endpoint: EC50 - Species: Daphnia = 0.463 mg/l - Duration h: 48

Endpoint: EC50 - Species: Algae = 1 mg/l - Duration h: 72

#### 12.2. Persistence and degradability

Product can be regarded as not easily biodegradable considering its component substances.

#### 12.3. Bioaccumulative potential

Not bioaccumulative

#### 12.4. Mobility in soil

Do not mix with waste water, rain or surface water. Floats on water, evaporates from liquid and solid surfaces but a significant amount may penetrate and pollute water table.

#### 12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

#### 12.6. Other adverse effects

None

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### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

The empty containers must be considered special waste materials to take to dump of type 2B. If previously cleansed, they can be admitted in first class dumps.

Recover, if possible. Send to authorised disposal plants or for incineration under controlled conditions. In so doing, comply with the local and national regulations currently in force.

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### SECTION 14: Transport information

H 0014 / 1 /  
EN



ICR spa  
Via M. Gasparini, 7  
42124 Reggio Emilia, Italia  
+39 0522-517803



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Limited quantities, not subject to ADR norms for internal packaging of up to 5 litres and maximum packaging of 30kg.

14.1. UN number	
ADR-UN number:	1263
IMDG-Un number:	1263
14.2. UN proper shipping name	
Shipping name:	Paints
14.3. Transport hazard class(es)	
ADR/RID:	
Class:	3
Label:	3
Classification Code:	F1
Maritime (IMDG/IMO):	
Class:	3.3
Label:	3
14.4. Packing group	
ADR Packing Group::	III°
IMDG-Packing group:	III
14.5. Environmental hazards	
Marine pollutant:	No
14.6. Special precautions for user	
IMDG-EMS:	F-E, <u>S-E</u>
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	
No	

### SECTION 15: Regulatory information

- 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture
- Dir. 67/548/EEC (Classification, packaging and labelling of dangerous substances)
  - Dir. 99/45/EC (Classification, packaging and labelling of dangerous preparations)
  - Dir. 98/24/EC (Risks related to chemical agents at work)
  - Dir. 2000/39/EC (Occupational exposure limit values)
  - Dir. 2006/8/EC
  - Regulation (EC) n. 1907/2006 (REACH)
  - Regulation (EC) n. 1272/2008 (CLP)
  - Regulation (EC) n. 790/2009 (ATP 1 CLP)
  - Regulation (EU) n. 453/2010 (Annex I)
  - Regulation (EU) n. 286/2011 (ATP 2 CLP)
- Restrictions related to the product or the substances contained according to Annex XVII Regulation (EC) 1907/2006 (REACH) and subsequent modifications:
- None
- Volatile Organic compounds - VOCs = 630.50 g/l  
Volatile CMR substances = 0.00 %  
Halogenated VOCs which are assigned the risk phrase R40 = 0.00 %  
Organic Carbon - C = 0.46
- Where applicable, refer to the following regulatory provisions :
- Directive 82/501/EEC ('Activities linked to risks of serious accidents') and subsequent amendments.
  - Regulation (EC) nr 648/2004 (detergents).
  - 1999/13/EC (VOC directive)
- 15.2. Chemical safety assessment
- No

### SECTION 16: Other information

- Text of phrases referred to under heading 3:
- R10 Flammable.
  - R11 Highly flammable.
  - R14 Reacts violently with water.
  - R20 Harmful by inhalation.
  - R20/21 Harmful by inhalation and in contact with skin.
  - R34 Causes burns.
  - R36/37/38 Irritating to eyes, respiratory system and skin.
  - R37 Irritating to respiratory system.
  - R42 May cause sensitization by inhalation.
  - R43 May cause sensitization by skin contact.
  - R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.
  - R48/25 Toxic: danger of serious damage to health by prolonged exposure if swallowed.
  - R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
  - R60 May impair fertility.
  - R61 May cause harm to the unborn child.
  - R65 Harmful: may cause lung damage if swallowed.
  - R66 Repeated exposure may cause skin dryness or cracking.
  - R67 Vapours may cause drowsiness and dizziness.





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R68 Possible risk of irreversible effects.

H226 Flammable liquid and vapour.  
H336 May cause drowsiness or dizziness.  
H317 May cause an allergic skin reaction.  
H332 Harmful if inhaled.  
H312 Harmful in contact with skin.  
H319 Causes serious eye irritation.  
H335 May cause respiratory irritation.  
H315 Causes skin irritation.  
H373 May cause damage to organs through prolonged or repeated exposure if inhaled.  
H304 May be fatal if swallowed and enters airways.  
H225 Highly flammable liquid and vapour.  
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.  
H302 Harmful if swallowed.  
H314 Causes severe skin burns and eye damage.  
H318 Causes serious eye damage.  
H341 Suspected of causing genetic defects.  
H360FD May damage fertility. May damage the unborn child.  
H370 Causes damage to organs.  
H372 Causes damage to organs through prolonged or repeated exposure.  
H400 Very toxic to aquatic life.  
H410 Very toxic to aquatic life with long lasting effects.

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre, Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van Nostrand Reinold

CCNL - Appendix 1

Insert further consulted bibliography

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

This MSDS cancels and replaces any preceding release.

ADR:	European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS:	Chemical Abstracts Service (division of the American Chemical Society).
CLP:	Classification, Labeling, Packaging.
DNEL:	Derived No Effect Level.
EINECS:	European Inventory of Existing Commercial Chemical Substances.
GHS:	Globally Harmonized System of Classification and Labeling of Chemicals.
IMDG:	International Maritime Code for Dangerous Goods.
INCI:	International Nomenclature of Cosmetic Ingredients.
KSt:	Explosion coefficient.
LC50:	Lethal concentration, for 50 percent of test population.
LD50:	Lethal dose, for 50 percent of test population.
LTE:	Long-term exposure.
N.A.:	Not applicable.
N.D.:	Not determined.
PNEC:	Predicted No Effect Concentration.
RID:	Regulation Concerning the International Transport of Dangerous Goods by Rail.
STE:	Short-term exposure.
STEL:	Short Term Exposure limit.
STOT:	Specific Target Organ Toxicity.
TLV:	Threshold Limiting Value.
TWATLV:	Threshold Limit Value for the Time Weighted Average 8 hour day. (ACGIH Standard).