





### Safety Data Sheet dated 22/12/2011, version 7

### 1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product Identifier

Mixture identification:

Trade name: Catalizzatore Trade code: CTN52

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

Recommended use:Surface coating

Uses advised against:

1.3 Details of the supplier of the safety data sheet Company:

Sirca S.p.A.

Address:

Viale Roma, 85

35010 S.Dono di Massanzago (PD) - ITALY

Tel. +39 0499322311

Competent person responsible for the safety data sheet:

safety@sirca.it

1.4 Emergency telephone number

SIRCA S.p.A.- Phone n. +39 499322311

Sirca S.p.A. +39 049 9322311 (08.00 - 17.00)

### 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:

F Highly flammable

Xi Irritant

R Phrases:

R11 Highly flammable.

R36 Irritating to eyes.

R43 May cause sensitization by skin contact.

R67 Vapours may cause drowsiness and dizziness.

Adverse physicochemical, human health and environmental effects:

No other risks known

### 2.2 Label elements







Xi Irritant F Highly flammable

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#### R Phrases:

R11 Highly flammable.

R36 Irritating to eyes.

R43 May cause sensitization by skin contact.

R67 Vapours may cause drowsiness and dizziness.

#### S Phrases:

S16 Keep away from sources of ignition - No smoking.

S23 Do not breathe gas/fumes/vapour/spray.

S24/25 Avoid contact with skin and eyes.

S29 Do not empty into drains.

S33 Take precautionary measures against static discharges.

S37 Wear suitable gloves.

S43 In case of fire, use CO2, Foam, Chemical powders

S9 Keep container in a well-ventilated place.

### Contents:

Hexamethylene diisocyanate, oligomers

**Special Provisions:** 

Contains isocyanates. See information supplied by the manufacturer.

#### 2.3 Other hazards

This product contains isocyanates. Producer's specifications are as follows: ready-to-use paints containing isocyanates may irritate mucosae, particularly those of the respiratory system, and may give rise to hypersensitivity reactions. Vapour or aerosol inhalation may lead to sensitization. Please take all the measures used for all solvent-containing paints while manipulating isocyanate-containing paints. Avoid vapour and aerosol inhalation. People with allergic or asthmatic precedents or subject to respiratory disorders should not handle paints containing isocyanates.

### Other Hazards:

No other risks known

## 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 corresponding classification:

25% - 48% ethyl acetate

F,Xi; R11-36-66-67

2.6/2 Flam. Liq. 2 H225

◆ 3.3/2 Eye Irrit. 2 H319

♦ 3.8/3 STOT SE 3 H336

### 25% - 48% Hexamethylene diisocyanate, oligomers

CAS: 28182-81-2

Xn,Xi; R20-37-43

◆ 3.8/3 STOT SE 3 H335

◆ 3.4.2/1 Skin Sens. 1 H317

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9.9% - 12.5% n-butyl acetate
    R10-66-67; substance with a Community workplace exposure limit
    ♦ 2.6/3 Flam. Liq. 3 H226

◆ 3.8/3 STOT SE 3 H336

5% - 7% 2-methoxy-1-methylethyl acetate
    R10; substance with a Community workplace exposure limit
    ♦ 2.6/3 Flam. Liq. 3 H226
3% - 5% xylene [isomer mixture]
    Xn,Xi; R65-10-20/21-38
    2.6/3 Flam. Liq. 3 H226

♦ 3.10/1 Asp. Tox. 1 H304

◆ 3.3/2 Eye Irrit. 2 H319

    ♦ 3.8/3 STOT SE 3 H335
    3.9/2 STOT RE 2 H373
    ◆ 3.2/2 Skin Irrit. 2 H315

◆ 3.1/4/Dermal Acute Tox. 4 H312

◆ 3.1/4/Inhal Acute Tox. 4 H332

2.5% - 3% toluene
    F,Repr. Cat. 3,Xn,Xi; R11-38-48/20-63-65-67
    2.6/2 Flam. Liq. 2 H225

♦ 3.7/2 Repr. 2 H361

    ♦ 3.10/1 Asp. Tox. 1 H304

♦ 3.9/2 STOT RE 2 H373

    1 3.2/2 Skin Irrit. 2 H315

◆ 3.8/3 STOT SE 3 H336

1% - 2% ethylbenzene
    N.67/548/CEE: 601-023-00-4 CAS: 100-41-4 EC: 202-849-4
    Xn; R.11-20
    2.6/2 Flam. Liq. 2 H225
    ♦ 3.1/4/Inhal Acute Tox. 4 H332
    DECL*
0.2% - 0.25% hexamethylene-di-isocyanate
    T,Xn,Xi; R23-36/37/38-42/43
    ♦ 3.3/2 Eye Irrit. 2 H319
    ◆ 3.8/3 STOT SE 3 H335
    1 3.2/2 Skin Irrit. 2 H315
    3.4.1/1 Resp. Sens. 1 H334
    1 3.4.2/1 Skin Sens. 1 H317
    3.1/3/Inhal Acute Tox. 3 H331
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\*DECL: Classified accordingly to directive 67/548/EEC

### 4. FIRST AID MEASURES

4.1 Description of first aid measures

In case of skin contact:

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 immediatley and dispose off safely.

In case of eves contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an opthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Induce vomiting only on doctor's advice

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

Contact a poisons centre

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).

### 5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media:

In case of fire, use CO2, Foam, Chemical powders

Extinguishing media which must not be used for safety reasons:

None in particular.

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 fire-fighters

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.

### 6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment.

Remove all sources of ignition.

Remove persons to safety.

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

Eliminate all unguarded flames and possible sources of ignition. Do not smoke.

6.3 Methods and material for containment and cleaning up

Collect the spilled product with no-sparking tools.

Rapidly recover the product. To do so, wear a mask and protective clothing.

Recover the product for re-use if possible, or for elimination. The product might, where appropriate, be absorbed by inert material.

After the product has been recovered, rinse the area and materials involved with water.

6.4 Reference to other sections

See also section 8 and 13

### 7. HANDLING AND STORAGE

7.1 Precautions for safe handling:

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

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.

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

Do not smoke while working.

See also section 8 for recomened protective equipment.

7.2 Conditions for safe storage, including any incompatibilities

Always keep in a well ventilated place.

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

Keep away from flame and sparks. Avoid accumulating electrostatic charge.

Place recipients on the ground whilst decanting, and wear anti-static clothing and shoes.

Keep away from food, drink and feed.

Incompatible materials:

None in particular.

Instructions as regards storage premises:

Cool and adequately ventilated.

Safety electric system.

7.3 Specific end use(s)

No further recommendations. Refer to point 1.2

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

ethyl acetate - REACH: 01-2119475103-46-xxxx, CAS: 141-78-6, EC No: 205-500-4
OEL Type: 04 LTE mg/m3: N.A. LTE ppm: 400 STE mg/m3: N.A. STE ppm: N.A.
Behaviour: N.A. Notes: N.A.

ethyl acetate - REACH: 01-2119475103-46-xxxx, CAS: 141-78-6, EC No: 205-500-4

TLV TWA: 400 ppm - 1441,31 mg/m3

Hexamethylene diisocyanate, oligomers - Index: NA, CAS: 28182-81-2, EC No: NA

TLV TWA - TLV STEL- VLE 8h- VLE short: Data unavailable.

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n-butyl acetate - REACH: 01-2119485493-29-xxxx, CAS: 123-86-4, EC No: 204-658-1
           TLV TWA: 150 ppm - 712,64 mg/m3
           TLV STEL: 200 ppm - 950,18 mg/m3
     2-methoxy-1-methylethyl acetate - REACH: 01-2119475791-29-xxxx, CAS: 108-65-6, EC No:
     203-603-9
           OEL Type: 04 LTE mg/m3: 275 LTE ppm: 50 STE mg/m3: 550 STE ppm: 100 Behaviour:
           N.A. Notes: Pelle
     2-methoxy-1-methylethyl acetate - REACH: 01-2119475791-29-xxxx, CAS: 108-65-6, EC No:
     203-603-9
           VLE 8h: 275 mg/m3 - 50 ppm
           VLE short: 550 mg/m3 - 100 ppm
     xylene [isomer mixture] - REACH: 01-2119488216-32-xxxx, CAS: 1330-20-7, EC No: 215-535-7
           OEL Type: 04 LTE mg/m3: 221 LTE ppm: 50 STE mg/m3: 442 STE ppm: 100 Behaviour:
           N.A. Notes: pelle
     xylene [isomer mixture] - REACH: 01-2119488216-32-xxxx, CAS: 1330-20-7, EC No: 215-535-7
           VLE 8h: 221 mg/m3 - 50 ppm
           VLE short: 442 mg/m3 - 100 ppm
           TLV TWA: 100 ppm, A4 - 434,19 mg/m3, A4
           TLV STEL: 150 ppm, A4 - 651,29 mg/m3, A4
     toluene - REACH: 01-2119471310-51-xxxx, CAS: 108-88-3, EC No: 203-625-9
           VLE 8h: 50 ppm - 192 mg/m3 Skin
           VLE short: 100 ppm - 384 mg/m3 Skin
           TLV TWA: 50 ppm, A4 - 188,4 mg/m3, A4 Skin
           TLV STEL: A4 Skin
     ethylbenzene - Index: 601-023-00-4, CAS: 100-41-4, EC No: 202-849-4
           VLE 8h: 442 mg/m3 - 100 ppm
           VLE short: 884 mg/m3 - 200 ppm
           TLV TWA: 100 ppm, A3 - 434,19 mg/m3, A3 Skin
           TLV STEL: 125 ppm, A3 - 542,74 mg/m3, A3 Skin
     hexamethylene-di-isocyanate - REACH: 01-2119457571-37-xxxx, CAS: 822-06-0, EC No:
     212-485-8
           TLV TWA: 0,01 ppm - 0,03 mg/m3
8.2 Exposure controls
Eye protection:
     Use eye protection devices. Example: closed safety visors, goggles with side protection. Do not
     wear contact lenses.
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Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Because of the synergetic effect of the substances contained in the formulation it is not possible to identify a unique material that can resist to their fusion. Multi - layer protective gloves can be suitable for mixes of substances. Pay attention to the data about grade of protection and of permeation rate furnished by the producer of the gloves about the substances listed on point 3 of this sheet.

Respiratory protection:

Use adequate protective respiratory equipment, e.g. CEN/FFP-2(S) or CEN/FFP-3(S).

Thermal Hazards:

None known

Environmental exposure controls:

None known

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### 9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance and colour: liquid

Odour: characteristic

Odour threshold: N.A. pH: N.A. N.A. Melting point / freezing point: < 1°C

Initial boiling point and boiling range: > 55°C

Solid/gas flammability: N.A.

Upper/lower flammability or explosive limits: N.A.

Vapour density:N.A.Flash point:< 21 ℃</td>Evaporation rate:N.A.Vapour pressure:N.A.

Relative density: 0.94 Kg/l a 20℃

Solubility in water: N.A.
Lipid solubility: N.A.
Partition coefficient (n-octanol/water): N.A.
Auto-ignition temperature: > 250°C

Decomposition temperature: N.A.

Viscosity (typical value): 12 " Din cup # 4

Explosive properties: N.A. Oxidizing properties: N.A.

9.2 Other information

Miscibility: N.A. Fat Solubility: N.A. Conductivity: N.A.

Substance Groups relevant properties N.A.

## 10. STABILITY AND REACTIVITY

10.1 Reactivity

Stable under normal conditions

10.2 Chemical stability

Stable under normal conditions

10.3 Possibility of hazardous reactions

No dangerous reaction is stored and used appropriately.

10.4 Conditions to avoid:

Avoid accumulating electrostatic charge.

Vapours can form explosive mixtures with air.

10.5 Incompatible materials:

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

10.6 Hazardous decomposition products:

vapours potentially dangerous to health may be released.

# 11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

There is no toxicological data available on the mixture. Consider the individual concentration of each component to assess toxicological effects resulting from exposure to the mixture.

Toxicological information on main components of the mixture:

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Test: LD50 Route: Skin Species: Rabbit > 5000 mg/kg Duration: N.A. Source: N.A.
                 Test: LD50 Route: Oral Species: Rat = 5620 mg/kg Duration: N.A. Source: N.A.
                 Notes: N.A.
                 Test: LC50 Route: Inhalation Species: Rat > 29.3 mg/l Duration: 4h Source: N.A.
                 Notes: N.A.
                 Test: Skin Irritant Route: Skin Species: Rabbit Negative N.A. N.A. Duration: N.A.
                 Source: N.A. Notes: N.A.
                 Test: Respiratory Tract Corrosive Route: Inhalation Species: N.A. Positive N.A. N.A.
                 Duration: N.A. Source: N.A. Notes: N.A.
                 Test: Genotoxicity Route: N.A. Species: N.A. Negative N.A. N.A. Duration: N.A.
                 Source: N.A. Notes: N.A.
           Hexamethylene diisocyanate, oligomers - Index: NA, CAS: 28182-81-2, EC No: NA
                 Test: LD50 Route: Oral Species: Rat Female > 2500 mg/kg Duration: N.A. Source:
                 N.A. Notes: Method: OECD TG 423
                 Test: LD50 Route: Skin Species: Rat > 2000 mg/kg Duration: N.A. Source: N.A.
                 Notes: Method: OECD TG 402
                 Test: LC50 Route: Inhalation Mist Species: Rat Female = 390 mg/m3 Duration: 4h
                 Source: N.A. Notes: Method: OECD 403
           xylene [isomer mixture] - REACH: 01-2119488216-32-xxxx, CAS: 1330-20-7, EC No: 215-535-7
                 Test: LD50 Route: Inhalation Species: Rat = 27 mg/l Duration: 4h Source: N.A.
                 Notes: N.A.
                 Test: LD50 Route: Oral Species: Rat = 3523 mg/kg Duration: N.A. Source: N.A.
                 Notes: N.A.
                 Test: LD50 Route: Skin Species: Rabbit = 12126 mg/kg Duration: N.A. Source: N.A.
                 Notes: N.A.
           hexamethylene-di-isocyanate - REACH: 01-2119457571-37-xxxx, CAS: 822-06-0, EC No:
           212-485-8
                 Test: LD50 Route: Oral Species: Rat = 746 mg/kg Duration: N.A. Source: N.A.
                 Notes: Method: OECD TG 401
                 Test: LD50 Route: Skin Species: Rabbit > 7000 mg/kg Duration: N.A. Source: N.A.
                 Notes: Method: OECD TG 402
                 Test: LC50 Route: Inhalation Species: Rat = 0.124 mg/l Duration: 4h Source: N.A.
                 Notes: Method: OECD TG 403 - Conc. del vapore saturo di 1,6-HDI a 25℃ 0,095 mg/l
2-methoxy-1-methylethyl acetate - REACH: 01-2119475791-29-xxxx, CAS: 108-65-6, EC No: 203-603-9
     DL50 ORAL(RAT): > 5.000 MG/KG
     CL50 INHALATIÓN (RAT): >23.8 MG/L 6H
xylene [isomer mixture] - REACH: 01-2119488216-32-xxxx, CAS: 1330-20-7, EC No: 215-535-7
     LD50 (RAT) ORAL: 5000 MG/KG
toluene - REACH: 01-2119471310-51-xxxx, CAS: 108-88-3, EC No: 203-625-9
     LD50 (RABBIT) SKIN: 14 G/KG (14000 MG/KG)
     LD50 (RAT) YOUNGADULTS ORAL: 5542 MG/KG BW
ethylbenzene - Index: 601-023-00-4, CAS: 100-41-4, EC No: 202-849-4
     LD50 (RAT) ORAL: 3500 MG/KG
     LD50 (RAT) ORAL: 4710 MG/KG BW
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ethyl acetate - REACH: 01-2119475103-46-xxxx, CAS: 141-78-6, EC No: 205-500-4

## 12. ECOLOGICAL INFORMATION

12.1 Toxicity

Adopt good working practices, so that the product is not released into the environment. ethyl acetate - REACH: 01-2119475103-46-xxxx, CAS: 141-78-6, EC No: 205-500-4

Test: LC50 Species: Fish Duration h: 96 mg/l: 454.7 Test: EC50 Species: Daphnia Duration h: 48 mg/l: 154 Test: EC50 Species: Algae Duration h: 48 mg/l: 3300

12.2 Persistence and degradability

None known

12.3 Bioaccumulative potential

N.A.

12.4 Mobility in soil

N.A.

12.5 Results of PBT and vPvB assessment

12.6 Other adverse effects

None known

### 13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

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. Where applicable, refer to the following regulatory provisions: 91/156/EEC, 91/689/EEC, 94/62/EC and subsequent amendments.

# 14. TRANSPORT INFORMATION

ADR/RID: 1263, Paint related material, 3, II, ADR

IMCO: 3 UN1263 P.G. II

ICAO/IATA-DGR: 3 UN1263 P.G. II P.I. 307 IMDG-EMS: F-E , <u>S-E</u>

### 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/EEC (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/CE. Regulation (CE) n. 1907/2006 (REACH), Regulation (CE) n.1272/2008 (CLP), Regulation (CE) n.790/2009.

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).

Council Directive 98/24/EC of 7 April 1998 on the protection of the health and safety of workers from the risks related to chemical agents at work.

Directive 1999/13/CE

Total Volatile Organic Compounds (typical value): 70 %

Total Volatile Organic Carbon (typical value):

41.26 %

Total solids content: 29.4 - 30.6 %

15.2 Chemical Safety Assessment

Nο

### 16. OTHER INFORMATION

Text of phrases referred to under heading 3:

R.11 Highly flammable.

R10 Flammable.

R11 Highly flammable.

R20 Harmful by inhalation.

R20/21 Harmful by inhalation and in contact with skin.

R23 Toxic by inhalation.

R36 Irritating to eyes.

R36/37/38 Irritating to eyes, respiratory system and skin.

R37 Irritating to respiratory system.

R38 Irritating to skin.

R42/43 May cause sensitization by inhalation and skin contact.

R43 May cause sensitization by skin contact.

R48/20 Harmful: danger of serious damage to health by prolonged exposure through inhalation.

R63 Possible risk of 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.

H225 Highly flammable liquid and vapour.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H317 May cause an allergic skin reaction.

H226 Flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H373 May cause damage to organs through prolonged or repeated exposure.

H315 Causes skin irritation.

H312 Harmful in contact with skin.

H361 Suspected of damaging fertility or the unborn child.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H331 Toxic if inhaled.

Paragraphs modified from the previous revision:

- 3. COMPOSITION/INFORMATION ON INGREDIENTS
- 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
- 11. TOXICOLOGICAL INFORMATION

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 - Eighth Edition - Van

Nostrand Reinold ACGIH - Threshold Limit Values - 2004 edition

# RESTRICTED TO PROFESSIONAL USERS

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.