



Safety Data Sheet dated 13/4/2011, version 1

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

1.1 Product Identifier

Mixture identification:

Trade name: CATALIZZATORE I.V.65 N.I.

Trade code: IV65

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

Product type and use: mixing of isocyanic polyamer

1.3 Details of the supplier of the safety data sheet

Supplier:

INVEBI international sas 21040 Orago (VA) - ITALY - Via varesina 78/B - tel. 39-331-

218018/217004 - fax 39-331-216484

Competent person responsible for the safety data sheet:

lab@invebi.it

1.4 Emergency telephone number

INVEBI international sas tel. 39-0331-218018/217004 Fax. +39-0331-216484

Poison Centre - Ospedale di Niguarda - Milan - Tel. 02/66101029

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

Xn Harmful

Xi Irritant

R Phrases:

R11 Highly flammable.

R20 Harmful by inhalation.

R36 Irritating to eyes.

R42 May cause sensitization by inhalation.

R66 Repeated exposure may cause skin dryness or cracking.

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2 Label elements





Symbols:

Xn Harmful

F Highly flammable

R Phrases:

R11 Highly flammable.

R20 Harmful by inhalation.

IV65/1

R36 Irritating to eyes.

R42 May cause sensitization by inhalation.

R66 Repeated exposure may cause skin dryness or cracking.

S Phrases:

S23 Do not breathe gas/vapour

S25 Avoid contact with eyes.

S29 Do not empty into drains.

S36/37 Wear suitable protective clothing and gloves.

S43 In case of fire, use: dust chemistry, foam, carbonic anhydride.

S45 In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

Contents:

2-methyl-m-phenylene diisocyanate; toluene-2,4-di-isocyanate;

Special Provisions:

Contains isocyanates. See information supplied by the manufacturer.

2.3 Other hazards

Other Hazards:

No other hazards

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% - 30% ethyl acetate

N.67/548/EEC: 607-022-00-5 CAS: 141-78-6 EC: 205-500-4

F,Xi; R11-36-66-67

6 2.6/2 Flam. Liq. 2 H225

3.3/2 Eye Irrit. 2 H319

3.8/3 STOT SE 3 H336

20% - 25% n-butyl acetate

N.67/548/EEC: 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

15% - 20% 4-methylpentan-2-one; isobutyl methyl ketone

N.67/548/EEC: 606-004-00-4 CAS: 108-10-1 EC: 203-550-1

F,Xn,Xi; R11-20-36/37-66 2.6/2 Flam. Liq. 2 H225

3.3/2 Eye Irrit. 2 H319

3.8/3 STOT SE 3 H335

3.1/4/Inhal Acute Tox. 4 H332

3% - 5% 2-methoxy-1-methylethyl acetate

N.67/548/EÉC: 607-195-00-7 CAS: 108-65-6 EC: 203-603-9 R10; substance with a Community workplace exposure limit

2.6/3 Flam. Liq. 3 H226

1% - 3% o-xylene

N.67/548/EEC: 601-022-00-9 CAS: 1330-20-7 EC: 215-535-7

Xn,Xi; R10-20/21-38

2.6/3 Flam. Liq. 3 H226

3.2/2 Skin Irrit. 2 H315

3.1/4/Dermal Acute Tox. 4 H312

3.1/4/Inhal Acute Tox. 4 H332

0.1% - 0.25% 2-methyl-m-phenylene diisocyanate; toluene-2,4-di-isocyanate;

N.67/548/EEC: 615-006-00-4 CAS: 584-84-9 EC: 209-544-5

Carc. Cat. 3,T+,Xn,Xi; R26-36/37/38-40-42/43-52/53

3.6/2 Carc. 2 H351

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 Resp. Sens. 1 H334

(1) 3.4.2/1 Skin Sens. 1 H317

4.1/C3 Aquatic Chronic 3 H412

3.1/2/Inhal Acute Tox. 2 H330

200 mg/kg hexamethylene-di-isocyanate

N.67/548/EEC: 615-011-00-1 CAS: 822-06-0 EC: 212-485-8

T,Xn,Xi; R23-36/37/38-42/43

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 Resp. Sens. 1 H334

3.4.2/1 Skin Sens. 1 H317

3.1/3/Inhal Acute Tox. 3 H331

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 toxin 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 eyes 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:

Do NOT induce vomiting.

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.

After contact with skin, wash immediately with soap and plenty of water.

4.2 Most important symptoms and effects, both acute and delayed

None

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

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media:

CO2 or Dry chemical fire extinguishe.

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.

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

Provide adequate ventilation.

Use appropriate respiratory protection.

See protective measures under point 7 and 8.

IV65/1

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

Wash with plenty of 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.

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.

Contamined clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recomened protective equipment.

7.2 Conditions for safe storage, including any incompatibilities

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)

None in particular

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

```
8.1 Control parameters
```

ethyl acetate - Index: 607-022-00-5, CAS: 141-78-6, EC No: 205-500-4

TLV-TWA: ppm 400

n-butyl acetate - Index: 607-025-00-1, CAS: 123-86-4, EC No: 204-658-1

TLV-TWA: ppm 150 TLV-STEL: ppm 200

4-methylpentan-2-one; isobutyl methyl ketone - Index: 606-004-00-4, CAS: 108-10-1, EC No:

203-550-1

VLE 8h: ppm 20 mg/m3 83

VLE short: ppm 50 mg/m3 208

TLV-TWA: ppm 50 TLV-STEL: ppm 75

2-methoxy-1-methylethyl acetate - Index: 607-195-00-7, CAS: 108-65-6, EC No: 203-603-9

VLE 8h: ppm 50 mg/m3 275 ,Skin VLE short: ppm 100 mg/m3 550 ,Skin

o-xylene - Index: 601-022-00-9, CAS: 1330-20-7, EC No: 215-535-7

VLE 8h: ppm 50 - mg/m3 221 ,Skin VLE short: ppm 100 - mg/m3 442 ,Skin

TLV-TWA: ppm 100 ,A4 TLV-STEL: ppm 150 ,A4

2-methyl-m-phenylene diisocyanate; toluene-2,4-di-isocyanate; - Index: 615-006-00-4, CAS:

584-84-9, EC No: 209-544-5

TLV-TWA: ppm 0,005 SEN A4

TLV-STEL: ppm 0,02 SEN A4

hexamethylene-di-isocyanate - Index: 615-011-00-1, CAS: 822-06-0, EC No: 212-485-8 TLV-TWA: ppm 0.005

8.2 Exposure controls

Eye protection:

Use close fitting safety goggles, don't use eye lens.

Protection for skin:

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

Protection for hands:

Use protective gloves that provides comprehensive protection, e.g. P.V.C., neoprene or rubber.

Respiratory protection:

Use respiratory protection where ventilation is insufficient or exposure is prolonged, e.g. CEN/FFP-2(S) or CEN/FFP-3(S).

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

Thermal Hazards:

None

Environmental exposure controls:

None

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance and colour: transparent liquid

Odour: of solvent Odour threshold: N.A.

Viscosity: ford n°4 a 20°C = 10 sec

Solid content: 30%+-1
Specific weight: 0.95
Solid/gas flammability: N.A.

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

Vapour density: N.A.
Flash point: -4
Evaporation rate: N.A.
Vapour pressure: N.A.
Relative density: N.A.
Solubility in water: none
Lipid solubility: N.A.
Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: No 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

None

10.4 Conditions to avoid:

Stable under normal conditions.

10.5 Incompatible materials:

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

10.6 Hazardous decomposition products:

None.

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:

ethyl acetate - Index: 607-022-00-5, CAS: 141-78-6, EC No: 205-500-4

OBSERVATIONS ON HUMAN SUBJECTS:

400 ppm: eye irritant.

Serious toxic effects at 2,000ppm/60 mins, symptoms of malaise at 800 ppm. Inhalatory toxicity: TCLo 400 ppm, irritation to nose, eyes, and respiratory system.

n-butyl acetate - Index: 607-025-00-1, CAS: 123-86-4, EC No: 204-658-1

OBSERVATIONS ON HUMAN SUBJECTS:

Inhalation: 3300 ppm (16 mg/l), for short periods, causeserious 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 aliquid 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

o-xvlene - Index: 601-022-00-9. CAS: 1330-20-7. EC No: 215-535-7

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.

12. ECOLOGICAL INFORMATION

12.1 Toxicity

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

12.2 Persistence and degradability

IV65/1

None

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

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.

14. TRANSPORT INFORMATION

14.1 UN number:

ADR-UN Number: 1263 IATA-UN Number: 1263 IMDG-UN Number: 1263

14.2 UN proper shipping name:

ADR-Shipping Name: PAINT or PAINT RELATED MATERIAL IATA-Shipping Name: PAINT or PAINT RELATED MATERIAL IMDG-Shipping Name: PAINT or PAINT RELATED MATERIAL

14.3 Transport hazard class(es):

ADR-Class: 3

ADR-HI number: 33 IATA-Class: 3

IATA-Label: Flamm. Liquid

IMDG-Class: 3

Sea (IMO): 3,3 UN 1263 pag. 3372 RINA 3 C21

14.4 Packing Group:

ADR-Packing Group: II
IATA-Packing group: II
IMDG-Packing group: II

14.5 Environmental hazards

IMDG-Marine pollutant: No

14.6 Special Precautions for User



ADR-S.P.: 640D
ADR-Tunnel Restriction Code: (D/E)
IATA-Passenger Aircraft: 305
IATA-Cargo Aircraft: 307
IATA-S.P.: A72
IATA-ERG: 3L

IMDG-EmS: F-E , <u>S-E</u>

IMDG-Storage category: E

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

Environmental Pollutant:

No

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.

UE(dir 2004/42/CE) Pronto all'Uso / Ready to use

Volatile Organic compounds - VOCs = 70.00 %

Volatile Organic compounds - VOCs = 667.66 g/l

Volatile CMR substances = 0.00 %

Halogenated VOCs which are assigned the risk phrase R40 = 0.00 %

Organic Carbon - C = 0.37

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

16. OTHER INFORMATION

Text of phrases referred to under heading 3:

R10 Flammable.

R11 Highly flammable.

R20 Harmful by inhalation.

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

R23 Toxic by inhalation.

R26 Very toxic by inhalation.

R36 Irritating to eyes.

R36/37 Irritating to eyes and respiratory system.

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

R38 Irritating to skin.

R40 Limited evidence of a carcinogenic effect.

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

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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.

H226 Flammable liquid and vapour.

H335 May cause respiratory irritation.

H332 Harmful if inhaled.

H315 Causes skin irritation.

H312 Harmful in contact with skin.

H351 Suspected of causing cancer.

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

H317 May cause an allergic skin reaction.

H412 Harmful to aquatic life with long lasting effects.

H330 Fatal if inhaled.

H331 Toxic if inhaled.

This document was prepared by a competent person who has received appropriate training. Main bibliographic sources:

NIOSH - Registry of toxic effects of chemical substances (1983)

I.N.R.S. - Fiche Toxicologique

CCNL - Appendix 1 "TLV for 1989-90"

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.