



SAFETY DATA SHEET 112

CTW 19

1 IDENTIFICATION OF THE MIXTURE AND THE COMPANY

1.1 Product identifier

Product name CTW 19

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

Description/Application CATALIST

1.3 Details of the supplier of the safety data sheet

Name: BERICALCE di De Toni Michael

Full address: Via O. da Pordenone n.18 - 36100 Vicenza - Italia

Phone: +39 0444 929102 +39 0444 923317

Fax: +39 0444 929102

E-mail address of the competent person

responsible to the Safety Data Sheet info@bericalce.it

1.4 Emergency telephone number

For urgent inquiries refer to SANITARY EMERGENCY

2. HAZARD IDENTIFICATION

2.1 Classification of the substance or mixture

The product is classified as dangerous pursuant to the provisions of Regulation (EC) 1272/2008 (CLP) (and subsequent amendments and adjustments). The product therefore requires a safety data sheet compliant with the provisions of Regulation (EU) 2015/830. Any additional information regarding risks to health and / or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indications:

Acute toxicity, category 4 H332 Harmful if inhaled.

Specific target organ toxicity - H335 May cause respiratory irritation.

single exposure, category 3

Skin sensitization, category 1 H317 May cause an allergic skin reaction.

2.2 Label elements

Danger labeling pursuant to Regulation (EC) 1272/2008 (CLP) and subsequent amendments and adjustments. Hazard pictograms:



Warnings: Attention

SAFETY DATA SHEET 112

CTW 19

Hazard statements:

H332 Harmful if inhaled.

H335 May cause respiratory irritation. H317 May cause an allergic skin reaction.

EUH204 Contains isocyanates. It can cause an allergic reaction.

Precautionary advice: P280 Wear protective gloves.

P261 Avoid breathing dust / fume / gas / mist / vapors / spray.
P312 Call a POISON CENTER / doctor / if you feel unwell. . .
P403 + P233 Keep container tightly closed and in a well-ventilated place.
P362 + P364 Remove contaminated clothing and wash before wearing again.

Contains: HDI oligomers, iminooxadiazindione Product not intended for the uses envisaged by Dir. 2004/42 / EC.

2.3 Other dangers

Based on available data, the product does not contain any PBT or vPvB substances as more than 0,1%

3 COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substance

No relevant information.

3.2 Miscele

It contains:

Identification Conc.%. Classification 67/548 / EEC. Classification 1272/2008 (CLP).

5-HDI oligomers, iminooxadiazindione

CAS. 28182-81-2 0 ≤ x < 0,0015 Acute Tox. 4 H332, STOT SE 3 H335, Skin Sens. 1 H317

CE 500-060-2

INDEX

Nr. Reg. 01-2119488934-20

The full text of the hazard statements (H) is given in section 16 of the sheet.

4 FIRST AID MEASURES

4.1 Description of first aid measures

EYES: Remove any contact lenses. Wash immediately and abundantly with water peR at least 15 minutes, opening the eyelids well. Consult a physician if the problem persists. SKIN: Take off contaminated clothing. Wash immediately and abundantly with water.

If irritation persists, consult a doctor. Wash the contaminated garments before reusing them.

INHALATION: Take the person to fresh air. If breathing is difficult, call a doctor right away.

INGESTION: Get medical attention immediately. Induce vomiting only on medical advice. Do not administer nothing orally if the subject is unconscious and if not authorized by the doctor.

Most important symptoms and effects, both acute and delayed

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

For symptoms and effects caused by the contained substances, see chap. 11.

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

No specific information on symptoms and effects caused by the product is known.

5 FIREFIGHTING MEASURES

5.1 Extinguishing media

SUITABLE EXTINGUISHING EQUIPMENT

The extinguishing equipment should be conventional: carbon dioxide, foam, powder and water spray. UNSUITABLE EXTINGUISHING EQUIPMENT

Nothing in particular.

5.2 Special hazards arising from the substance or mixture

HAZARDS CAUSED BYEXPOSURE IN THE EVENTOF FIRE

Do not breathe combustion products.

5.3 Advice for firefighters

GENERAL INFORMATION

Use jets of water to cool the cointainers to prevent product decomposition and the development of substances potentially hazardous for health. Always wear full fire prevention gear. Collect extinguishing water to prevent it from draining into the sewer system. Dispose of contamined water used for extinction and the remains of the fire according to applicable regulations.

EQUIPMENT

Normal clothing for firefighting, such as an open circuit compressed air breathing apparatus (EN 137), flame retardant suit (EN469), flame retardant gloves (EN 659) and fire brigade boots (HO A29 or A30).

6 ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Block the loss if there is no danger. Wear suitable protective equipment (including personal protective equipment referred to in section 8 of the safety datas sheet) to prevent any contmination of skin, eyes and personal clothing. These direction are valid both for the workers to work which for emergency interventions.

6.2 Environmental precautions

The product must not penetrate into the sewer system or come into contact with surface or ground water.

6.3 Methods and material for containment and cleaning up

Draw product spilled in suitable container. Asses the compatibility of the container to be used with the product, verifying section 10. Absorb the remaining inert absorbent material.

Ensure adequate ventilation of the place affected by the loss.

The disposal of contaminated material must be made in accordance with section 13.

6.4 Reference to other sections

Any information on personal protection and disposal is given in sections 8 and 13.

7 HANDLING AND STORAGE

7.1 Precautions for safe handling

Handle the product after consulting all the other sections of this safety data sheet.

Avoid the dispersion of the product into the environment. Do not eat, drink or smoke during use.

Remove contaminated clothing and protective equipment before entering eating areas.

7.2 Conditions for safe storage, including any incompatibilities

Keep only in the original container.

Keep the containers closed, in a well-ventilated place, away from direct sunlight.

Keep containers away from any incompatible materials, checking section 10.

7.3 Specific end use(s)

None in particular. Keep only in the original container.

Page 3of9 Bericalce

8 EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

HDI OLIGOMERS, IMINOOXADIAZINDIONE

Predicted No Effect Concentration on the Environment - PNEC.

Reference value in fresh water 490 mg / l Reference value in fresh water 0.1 mg / l

Reference value in sea water 0.01 mg/l

Reference value for sediment in fresh water 2530 mg / kg Reference value for sediments in sea water 253 mg / kg

Reference value for the terrestrial compartment 505 mg / kg

Health - Derived no-effect level - DNEL / DMEL

Effects on consumers Effects on workers

Route of Exposure Local Systemic Local Systemic Local Systemic Local Systemic acute acute chronic chronic acute acute chronic chronic

Inhalation 1 0.5 mg / m3 mg / m3

VND = hazard identified but no DNEL / PNEC available; NEA = no exposure expected; NPI = no hazard identified.

8.2 Exposure controls

Considering that the use of adequate technical measures should always have priority over personal protective equipment, ensure good ventilation in the workplace

through effective local aspiration. For the choice of personal protective equipment ask

possibly advice to your chemical suppliers. Personal protective equipment must bear the CE mark which certifies their compliance with current regulations.

Provide an emergency shower with face and eye basin.

HAND PROTECTION

Protect your hands with work gloves, category III (ref. standard EN 374).

Final selection of the material of the gloves must be considered: compatibility, degradation, breakage times and permeation.

In the case of preparartions the resistance of protective gloves to chemicals should be checked before use, as it expected

The gloves' limit depends on the duration and method of use.

SKIN PROTECTION

Wear work clothes with long sleeves and safety footware for professional use category II (ref. Directive 89/686/ EEC and law EN ISO 20344). Wash with soap and water after removing protective clothing.

EYE PROTECTION

We reccomend wearing hood visor or protective visor together with airtight goggles (ref. law EN 166). RESPIRATORY PROTECTION

In case of exceeding the threshold value (eg. TLV-TWA) of the substance or one or more of the substances contained on the product, you should wear a mask with filter Type A, whose class (1, 2 or 3) must be chosen according to the limit concentration of use (ref. standard EN 14387).

In the case there will be be gas or vapors of a different nature and / or gases or vapors with particles (aerosols, fumes, mists, etc.) should be provided for combined type filters.

The use of respiratory protective equipment is necessary in case the technical measures are not sufficient to limit the exposure of the worker to the threshold values considered.

The protection provided by masks is in any case limited.

In case that the substance in question is odorless or its olfactory threshold is higher than the related TLV-TWA, and in case of emergency, it is important to wear a compressed air breathing apparatus open circuit (ref Standard EN 137) or a respirator in socket outdoor air (ref. standard EN 138).

For the correct choice of respiratory protection device, refer to EN 529.

ENVIRONMENTAL EXPOSURE CONTROLS.

The emissions generated by manufacturing processes, including those generated by ventilation equipment, should be checked to ensure compliance with environmental standards.

Page 4of9 Bericalce

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance Liquid Colour Milky White Odour Colorless Odour threshold Not available На Not available Not available Melting point / freezing point Initial boiling point Not available Boiling range . Not available Flash point > 250 °C Evaporation rate Not available Flammability (solid, gas) Not available Lower inflammability limit Not available Upper infiammability limit Not available Lower explosive limit Not available Upper explosive limit Not available Vapour pressure Not available Vapour density Not available

Relative density 1,16

Solubility Not available Partition coefficient:: n-octanol/water Not available Not available Auto-ignition temperature Decomposition temperature Not available Not available Viscosity Explosive properties Not available Oxidising properties Not available Other information Not available

10 STABILITY AND REACTIVITY

10.1 Reactivity

9.2

There are no particular risks of reaction with other substances in normal conditions of use.

10.2 Chemical stability

The product is stable in normal conditions of use and storage.

10.3 Possibility of hazardous reactions

No hazardous reactions are foreseeable in normal conditions of use and storage.

10.4 Conditions to avoid

None in particular. However, follow the usual precautions against chemicals.

10.5 Incompatible materials

Information not available

10.6 Hazardous decomposition products

Information not available

Page 5of9 Bericalce

11 TOXICOLOGICAL INFORMATION

In the absence of experimental toxicological data on the product itself, the possible health hazards of the product were evaluated based on the properties of the substances containde, according to the criteria laid down by the relevant regulations for the classification.

Therefore, consider the concentration of each hazardous substances possibly mentioned in sect. 3, to assess toxicological effects resulting from exposure to the product.

11.1 Information on toxicological effects

Metabolism, kinetics, mechanism of action and other information

Information not available

Information on likely routes of exposure

Information not available

Delayed and immediate effects and chronic effects from short and long term exposure

Information not available

Interactive effects

Information not available

ACUTE TOXICITY

ATE (Inhalation) of the mixture: 11.00 mg / I

ATE (Oral) of the mixture: Not classified (no relevant component) ATE (Dermal) of the mixture: Not classified (no relevant component)

HDI oligomers, iminooxadiazindione

LD50 (Oral)> 2000 mg / kg Rat LD50 (Dermal)> 2000 mg / kg Rar LC50 (Inhalation) 0.39 mg / I / 4h Rat

SKIN CORROSION / SKIN IRRITATION

It does not meet the classification criteria for this hazard class

SERIOUS EYE DAMAGE / EYE IRRITATION

It does not meet the classification criteria for this hazard class

RESPIRATORY OR SKIN SENSITIZATION

Skin sensitizer

MUTAGENICITY ON GERMINAL CELLS

It does not meet the classification criteria for this hazard class

CARCINOGENICITY

It does not meet the classification criteria for this hazard class

REPRODUCTION TOXICITY

It does not meet the classification criteria for this hazard class

SPECIFIC TARGET ORGAN TOXICITY (STOT) - SINGLE EXPOSURE

It can irritate the respiratory tract

SPECIFIC TARGET ORGAN TOXICITY (STOT) - REPEATED EXPOSURE

It does not meet the classification criteria for this hazard class

DANGER IN CASE OF SUCTION

It does not meet the classification criteria for this hazard class

Page 6of9 Bericalce

12 ECOLOGICAL INFORMATION

Use according to good working practices, avoiding to disperse the product in the environment. Notify the competent authorities if the product has reached waterways or if it has contaminated the soil or vegetation.

12.1 Toxicity

HDI oligomers, iminooxadiazindione

LC50 - Fish> 100 mg / I / 96h Danio rerio

EC50 - Crustaceans> 100 mg / I / 48h Daphnia magna

12.2 Persistence and degradability

HDI oligomers, iminooxadiazindione

NOT rapidly degradable

12.3 Bioaccumulative potential

Information not available

12.4 Mobility in soil

Information not available

12.5 Results of PBT and vPvB assessment

On the basis of available data, the product does not contain any PBT or vPvB in percentage greater than 0,1%

12.6 Other adverse effects

Information not available

13 DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Reuse, when possible. Neat product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicabile regulations. Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations.

CONTAMINATED PACKAGING

Contaminated packaging must be recovered or disposed of in compliance with national waste management regulations.

14 TRANSPORT INFORMATION

The product must not be considered dangerous according to the provisions in force concerning the transport of dangerous goods by road (A.D.R.), by rail (RID), by sea (IMDG Code) and by air (IATA).

14.1 ONU number

Not applicable.

14.2 ONU shipping name

Not applicable.

14.3 Hazard classes connected to shipping

Not applicable.

14.4 Packaging group

Not applicable.

14.5 Environmental hazards

Not applicable.

14.6 Special precautions for users

Not applicable.

14.7 Shipping of bulk according to MARPOL 73/78 annex and the IBC code

No relevant information.

Page 7of9 Bericalce

15 REGULATORY INFORMATION

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

Seveso Category None

Restrictions relating to the product or contained substances pursuant to AnnexXVII to EC Regulation 1907/2006 Point 3

Substances in Candidate List (Art. 59 REACH): None

Substances subject to authorisarion (Annex XIV REACH): None

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012: None

<u>Substances subject to the Rotterdam Convention:</u> None

Substances subject to the Stockholm Convention: None

Healthcare controls Informations not available

Workers exposed to this chemical dangerous to health must be monitored health carried out in accordance with the provisions of art. 41 of Legislative Decree 81 of 9 April 2008 unless the risk to the safety and health of the worker has been assessed as irrelevant, in accordance with the provisions of art. 224 paragraph 2.

15.2 Chemical safety assessment

A chemical safety assessment has not been developed for the mixture / substances indicated in section 3.

16 OTHER INFORMATIONS

Text of hazard (H) indications mentioned in sections 2-3 of the sheet:

Acute Tox. 4 Acute toxicity, category 4

STOT SE 3 Specific target organ toxicity - single exposure, category 3

Skin Sens. 1 Skin sensitization, category 1

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H317 May cause an allergic skin reaction.

EUH204 Contains isocyanates. It can cause an allergic reaction.

LEGEND:

- ADR: European agreement for the transport of dangerous goods by road
- CAS NUMBER: Number of the Chemical Abstract Service
- EC50: Concentration that gives effect to 50% of the population subject to testing
- CE NUMBER: Identification number in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived no effect level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System for Classification and Labeling of Chemicals
- IATA DGR: Regulations for the transport of dangerous goods of the International Air Transport Association
- IC50: Concentration of immobilization of 50% of the population subject to testing
- IMDG: International maritime code for the transport of dangerous goods
- INDEX NUMBER: Identification number in Annex VI of CLP- LC50: Lethal concentration 50%
- LD50: Lethal Dose 50%
- OEL: Occupational exposure level
- PBT: Persistent, bioaccumulating and toxic according to REACH
- PEC: Predicted environmental concentration
- PEL: Predictable level of exposure
- PNEC: Predicted No Effect Concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation for the international transport of dangerous goods by train
- TLV: Threshold Limit Value

Page 7of8 Bericalce

SAFETY DATA SHEET 112

CTW 19

- TLV CEILING: Concentration that must not be exceeded during any time of occupational exposure.
- TWA STEL: Short term exposure limit
- TWA: Weighted average exposure limit
- VOC: Volatile organic compound
- vPvB: Very persistent and very bioaccumulating according to REACH
- WGK: Water hazard class (Germany).

GENERAL BIBLIOGRAPHY:

- 1. Regulation (EC) 1907/2006 of the European Parliament (REACH)
- 2. Regulation (EC) 1272/2008 of the European Parliament (CLP)
- 3. Regulation (EU) 790/2009 of the European Parliament (I Atp. CLP)
- 4. Regulation (EU) 2015/830 of the European Parliament
- 5. Regulation (EU) 286/2011 of the European Parliament (II Atp. CLP)
- 6. Regulation (EU) 618/2012 of the European Parliament (III Atp. CLP)
- 7. Regulation (EU) 487/2013 of the European Parliament (IV Atp. CLP)
- 8. Regulation (EU) 944/2013 of the European Parliament (V Atp. CLP)
- 9. Regulation (EU) 605/2014 of the European Parliament (VI Atp. CLP)
- 10. Regulation (EU) 2015/1221 of the European Parliament (VII Atp. CLP)
- 11. Regulation (EU) 2016/918 of the European Parliament (VIII Atp. CLP)
- 12. Regulation (EU) 2016/1179 (IX Atp. CLP)
- 13. Regulation (EU) 2017/776 (X Atp. CLP)
- 14. Regulation (EU) 2018/669 (XI Atp. CLP)
- 15. Regulation (EU) 2018/1480 (XIII Atp. CLP)
- 16. Regulation (EU) 2019/521 (XII Atp. CLP)
- The Merck Index. 10th Edition
- Handling Chemical Safety
- INRS Fiche Toxicologique (toxicological sheet)
- Patty Industrial Hygiene and Toxicology
- N.I. Sax Dangerous properties of Industrial Materials-7, 1989 Edition
- IFA GESTIS website
- ECHA Agency website
- Database of SDS models of chemical substances Ministry of Health and National Institute of Health

Note for users:

The information contained in the present sheet are based on our own knowledge on the date of the last version. Users must verify the suitability and thoroughness of provided information according to each specific use of the product. This document must not be regarded as a guarantee on any specific product property. The use of this product is not subject to our direct control; therefore, users must, under their own responsibility, comply with the current health and safety laws and regulations.

The producer is relieved from any liability arising from improper uses.

Provide appointed staff with adequate training on how to use chemical products.

BeriCalce ITALIA

Via Odorico da Pordenone, 18 - 36100 Vicenza - ITALIA Tel./Fax (+39) 0444 929102 - Tel. (+39) 0444 923317 Skype: bericalce - info@bericalce.com

bericalce.com