

Safety Data Sheet

according to Regulation (EC) No.1907/2006 (REACH), amended by COMMISSION REGULATION (EU) 2020/878

Product name : Catalyst, C&B Metabond R&D

Date of revision : 2022/03/31

1. Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier:

Product name: Catalyst, C&B Metabond R&D

Product code: S371-RD

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

Relevant identified uses of the product:

Dental cement to be used for research purposes on non-human subjects only.

1.3 Details of the supplier of the safety data sheet

Supplier: Parkell Europe AB

Address: Finvids väg 8, SE-194 27 Upplands Väsby

Telephone number: +46 850650575

e-mail address: pmattiucci@parkell.com

1.4 Emergency telephone number: 112

2. Hazards identification

GHS classification and label elements of the product

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No.1272/2008 [CLP]

PHYSICAL AND CHEMICAL HAZARDS

Flammable liquids: Category 2

HEALTH HAZARDS

Skin corrosion/irritation: Category 1

Serious eye damage/eye irritation: Category 1

Reproductive toxicity: Category 2

Specific target organ toxicity – repeated exposure: Category 2

ENVIRONMENT HAZARDS

Hazardous to the aquatic environment (Long-term): Category 3

(Note) GHS classification without description: Not classified/Classification not possible

2.2 Label elements

Labelling according to Regulation (EC) No.1272/2008 [CLP]



Signal word: Danger

HAZARD STATEMENT

H225 Highly flammable liquid and vapor

H314 Causes severe skin burns and eye damage

H361 Suspected of damaging fertility or the unborn child

H373 May cause damage to organs through prolonged or repeated exposure

H412 Harmful to aquatic life with long lasting effects

PRECAUTIONARY STATEMENT

Prevention

- P201 Obtain special instructions before use.
- P202 Do not handle until all safety precautions have been read and understood.
- P273 Avoid release to the environment.
- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P233 Keep container tightly closed.
- P240 Ground and bond container and receiving equipment.
- P241 Use explosion-proof electrical/ventilating/lighting equipment.
- P242 Use non-sparking tools.
- P243 Take action to prevent static discharges.
- P260 Do not breathe dust/fume/gas/mist/vapors/spray.
- P264 Wash contaminated parts thoroughly after handling.
- P280 Wear protective gloves/protective clothing/eye protection/face protection.
- P280 Use personal protective equipment as required.

Response

- P370 + P378 In case of fire: Use appropriate media other than water to extinguish.
- P321 Specific treatment is required.
- P314 Get medical advice/attention if you feel unwell.
- P308 + P313 IF exposed or concerned: Get medical advice/attention.
- P310 Immediately call a POISON CENTER/doctor/physician.
- P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
- P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
- P363 Wash contaminated clothing before reuse.
- P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

Storage

- P403 Store in a well-ventilated place. P235 Keep cool.
- P405 Store locked up.

Disposal

- P501 Dispose of contents/container in accordance with local/national regulation.

2.3 Other hazards

The product does not contain any ingredient designated as PBT and/or vPvB.

The product does not contain any ingredients designated as Endocrine disrupting properties.

Specific Physical and Chemical hazards

- Highly flammable liquid. Vapor/air mixture may explode.

3. Composition/information on ingredients

Mixture/Substance selection:

3.2 Mixture

Ingredient name	CAS No.	Content (%)
HAZCODE_EU	ECNO	
Borane, Tributyl-	122-56-5	60 – 95
Pyr. Liq. 1, H250; Skin Corr. 1B, H314	204-554-6	
Hexane	110-54-3	5 – 40
Flam. Liq. 2, H225; Skin Irrit. 2, H315; Repr. 2, H361f; STOT SE 3, H336; STOT RE 2, H373; Asp. Tox. 1, H304; Aquatic Chronic 2, H411	203-777-6	
Ethyl alcohol	64-17-5	0.1 – 10
Flam. Liq. 2, H225	200-578-6	

Components contributing to the hazard

The product does not contain any ingredients listed in REACH SVHC candidate list.

4. First-aid measures**4.1 Descriptions of first-aid measures**

General measures

Get medical advice/attention if you feel unwell.

Immediately call a POISON CENTER/doctor/physician.

IF INHALED

Remove person to fresh air and keep comfortable for breathing.

IF ON SKIN (or hair)

Take off immediately all contaminated clothing. Rinse skin with water or shower.

IF IN EYES

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

IF SWALLOWED

Rinse mouth. Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Specific information on symptom and effect are unknown.

4.3 Indication of any immediate medical attention and special treatment needed

Specific treatment is required.

5. Fire-fighting measures**5.1 Extinguishing media**

Suitable extinguishing media

In case of fire, use water mist, foam, dry powder, CO2, dry sand to extinguish.

Unsuitable extinguishing media

Do not use direct water jet.

5.2 Specific hazards arising from the substance or mixture

Will form toxic carbon oxides upon combustion.

5.3 Advice for firefighters

Specific fire-fighting measures

- Evacuate non-essential personnel to safe area.
- Shut off fuel to fire if possible to do so without hazard.
- Cool container with water spray.
- Prevent extinguishing water from entering sewers.

Special protective equipment and precautions for fire-fighters

- Wear fire resistant or flame retardant clothing.
- Firefighters should wear self-contained breathing apparatus with full face piece operated positive pressure mode.

6. Accidental release measures

6.1 Personnel precautions, protective equipment and emergency procedures

- Wear an air-supplied respirator for handling a spill at a poor ventilated workplace.
- Wear proper protective equipment.
- Eliminate all sources of ignition and ventilate the area.

6.2 Environmental precautions

- Prevent spills from entering sewers, watercourses or low areas.
- Do not wash away into sewers or waterway.

6.3 Methods and materials for containment and cleaning up

- Absorb spill with inert material (dry sand, earth, et al), then place in a chemical waste container.
- Fill the disposal into labelled, closable containers.

Preventive measures for secondary accident

- Stop leak if safe to do so.
- ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

6.4 Reference to other sections

- Refer to section 8
- Refer to section 13

7. Handling and storage

7.1 Precautions for safe handling

Preventive measures

(Exposure Control for handling personnel)

- Do not breathe dust/fume/gas/mist/vapors/spray.

(Protective measures against fire and explosion)

- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- Ground and bond container and receiving equipment.
- Use explosion-proof electrical/ventilating/lighting equipment.
- Use non-sparking tools.
- Take action to prevent static discharges.

(Safety treatments)

- Avoid contact with skin.
- Avoid contact with eyes.

Safety Measures

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Wear protective gloves/protective clothing/eye protection/face protection.

Use personal protective equipment as required.

Any incompatibilities data is not available.

Advice on general occupational hygiene

Wash contaminated parts thoroughly after handling.

Wash contaminated clothing before reuse.

7.2 Storage

Conditions for safe storage

Store in a well-ventilated place. Keep container tightly closed. Keep cool.

Keep cool. Protect from sunlight.

Store locked up.

Store at temperatures not exceeding specified values.

Storage temperature upper limit: 30°C

Container and packaging materials for safe handling data is not available.

7.3 Specific end use(s)

Information on Specific end use(s) is not available.

8. Exposure controls/personal protection

8.1 Control parameters

Adopted value

(Hexane)

ACGIH(1998) TWA: 50ppm (CNS impair; peripheral neuropathy; eye irr)

(Ethyl alcohol)

ACGIH(2009) STEL: 1000ppm (URT irr)

Notation

(Hexane)

Skin

EU Occupational exposure limit values (Workplace Exposure limits) compliant to relevant EU

Directive through 91/332/EEC to 2019/1831/EU

(Hexane)

LTEL: 72mg/m³; 20ppm

8.2 Exposure controls

Appropriate engineering controls

Exhaust/ventilator should be available.

Eye wash station should be available.

Washing facilities should be available.

Individual protection measures

Respiratory protection

Wear respiratory protection.

Hand protection

Wear protective gloves.

Eye protection

Wear safety glasses with side-shields or chemical safety goggle.

9. Physical and Chemical Properties

9.1 Information on basic physical and chemical properties

Physical state: Liquid

Color: Colorless

Odor: Slight odor

Odor threshold data is not available.

Melting point/Freezing point data is not available.

Boiling point or initial boiling point: (Hexane)69°C

Boiling range data is not available.

Flammability (gases, liquids and solids) data is not available.

Lower and upper explosion limit/flammability limit data is not available.

Flash point: (Hexane)-22°C

Auto-ignition temperature: (Hexane)225°C

Decomposition temperature data is not available.

pH data is not available.

Kinematic viscosity data is not available.

Solubility:

Solubility in water: Slightly soluble

Solubility in water data is not available.

Solubility in solvent data is not available.

n-Octanol/water partition coefficient data is not available.

Vapor pressure data is not available.

Vapor density data is not available.

Evaporation rate data is not available.

Density and/or relative density data is not available.

Relative vapor density (Air=1) data is not available.

Relative density of the Vapor/air – mixture at 20°C (Air = 1) data is not available.

Critical temperature data is not available.

Particle characteristics data is not available.

9.2 Other information

Other information is not available.

10. Stability and Reactivity

10.1 Reactivity

Reactivity data is not available.

10.2 Chemical stability

Stable under normal storage/handling conditions.

10.3 Possibility of hazardous reactions

Possibility of hazardous reactions data is not available.

10.4 Conditions to avoid

Conditions to avoid data is not available.

10.5 Incompatible materials

Acids, Strong acids, Bases, Strong bases, Oxidizing agents

10.6 Hazardous decomposition products

Hazardous decomposition products data is not available.

11. Toxicological Information

11.1 Information on toxicological effects

Acute toxicity data is not available.

Irritant properties

Skin corrosion/irritation data is not available.

Serious eye damage/irritation data is not available.

Allergenic and sensitizing effects data is not available.

Mutagenic effects data is not available.

Carcinogenicity

(Ethyl alcohol)

IARC-Gr.1 : Carcinogenic to humans

(Ethyl alcohol)

ACGIH-A3(2009) : Confirmed Animal Carcinogen with Unknown Relevance to Humans

Teratogenic effects data is not available.

Reproductive toxicity data is not available.

STOT

STOT-single exposure data is not available.

STOT-repeated exposure data is not available.

Aspiration hazard data is not available.

11.2 Information on other hazards

Endocrine disrupting properties is not available.

12. Ecological Information

12.1 Ecotoxicity

Aquatic toxicity

Harmful to aquatic life with long lasting effects

Water solubility

(Hexane)

0.0013 g/100 ml (20°C) (ICSC, 2000)

(Ethyl alcohol)

miscible (ICSC, 2000)

12.2 Persistence and degradability

(Hexane)

BOD_Degradation : 100% (Registered chemicals data check & review)

(Ethyl alcohol)

Degrade rapidly (BOD_Degradation : 89% (Registered chemicals data check & review, 1993))

12.3 Bioaccumulative potential

(Hexane)

log Pow=3.9 (ICSC, 2000)

(Ethyl alcohol)

log Pow=-0.32 (ICSC, 2000)

12.4 Mobility in soil

Mobility in soil data is not available.

12.5 Results of PBT and vPvB assessment

PBT and/or vPvB assessment data is not available.

12.6 Endocrine disrupting properties

Endocrine disrupting properties is not available.

12.7 Other adverse effects

Ozone depleting chemical data is not available.

13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging

13.1 Waste treatment methods

Avoid release to the environment.

Dispose of contents/container in accordance with local/national regulation.

Do not dump into sewers, on the ground or into any body of water.

Contaminated packing

Dispose of container after using the contents completely.

14. Transport Information

UN No., UN CLASS

14.1 UN No. or ID No.: 1993

14.2 UN Proper Shipping Name :

FLAMMABLE LIQUID, N.O.S. (Hexane, Ethanol mixture)

14.3 Class or division (Transport hazard class) : 3

14.4 Packing group : II

ERG GUIDE No.: 128

Special provisions No.: 274

IMDG Code (International Maritime Dangerous Goods Regulations)

14.1 UN No.: 1993

14.2 Proper Shipping Name :

FLAMMABLE LIQUID, N.O.S. (Hexane, Ethanol mixture)

14.3 Class or division : 3

14.4 Packing group : II

Special provisions No.: 274

IATA Dangerous Goods Regulations

14.1 UN No.: 1993

14.2 Proper Shipping Name :

FLAMMABLE LIQUID, N.O.S. (Hexane, Ethanol mixture)

14.3 Class or division : 3

Hazard labels : Flamm.liquid

14.4 Packing group : II

Special provisions No.: A3

14.5 Environmental hazards

MARPOL Annex III – Prevention of pollution by harmful substances

Marine pollutants (yes/no) : no

14.6 Special precautions for user

Special precautions for user is not applicable.

14.7 Maritime transport in bulk according to IMO instruments

Noxious Liquid ; Cat. Y

Hexane(Y-395)

Noxious Liquid ; Cat. Z

Ethyl alcohol(Z-021)

15. Regulatory Information

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

The product does not contain any ingredients listed in REACH SVHC candidate list.

Other information is not available.

Other regulatory information

Ensure this material in compliance with federal requirements and ensure conformity to local regulations.

15.2 Chemical safety assessment

No chemical safety assessment has been carried out for this product.

16. Other information

GHS classification and labelling

Flam. Liq. 2: H225 Highly flammable liquid and vapor

Skin Corr. 1: H314 Causes severe skin burns and eye damage

Repr. 2: H361 Suspected of damaging fertility or the unborn child

STOT RE 2: H373 May cause damage to organs through prolonged or repeated exposure

Aquatic Chronic 3: H412 Harmful to aquatic life with long lasting effects

Reference Book

Globally Harmonized System of classification and labelling of chemicals, UN

Recommendations on the TRANSPORT OF DANGEROUS GOODS 21th edit., 2019 UN

IMDG Code, 2018 Edition (Incorporating Amendment 39-18)

IATA Dangerous Goods Regulations (62nd Edition) 2021

EU REGULATION (EC) No. 1272/2008 (CLP), amended by COMMISSION REGULATION (EU) 2019/521

2020 EMERGENCY RESPONSE GUIDEBOOK (US DOT)

2021 TLVs and BEIs. (ACGIH)

Supplier's data/information

General Disclaimer

To the best of our knowledge, the information contained here in is accurate. However, we assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of user. All material may present unknown hazards and should be used in caution. Although certain hazards are described herein, we can not guarantee that these are the only hazards which exist.

The GHS classification data given here is based on current EU official data (Consolidated version of the CLP Regulation published in 14.11.2020).