SAFETY DATA SHEET

Trade name: DUAL COAT CATALYST

According to Regulation (EC) No 1907/2006 and Regulation (EU) 2020/878

Date of print: 08/03/2022
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Version: 1.0 / EN

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

1.1. Product identifier

Product name: DUAL COAT CATALYST / PICOTE DUAL COLOUR EPOXY FOR PICOTE BRUSH COATING™
Product code: PICOTE DC1000 E CATALYST / 2110001005

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

„B" component (amine) of two-component epoxy resin.

1.3. Details of the supplier of the safety data sheet

Producer/Supplier:	PICOTE SOLUTIONS OY LTD
Street/POB:	PIENTEOLLISUUSTIE 24
Postcode/City/Country:	06450 PORVOO, FINLAND
E-mail address for a competent person responsible for the safety data sheet:	richard@picotesolutions.com
Phone:	+44 7827 223237

1.4. Emergency telephone number

Regional Medicines and Poisons Information Centre NI, Belfast
Tel.: +44 844 892 0111 (24 hrs)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Hazard classes / categories	*Hazard statements*	
Skin Corr. 1A	H314	Causes severe skin burns and eye damage.
Skin Sens. 1	H317	May cause an allergic skin reaction.
Eye Dam. 1	H318	Causes serious eye damage.
Repr. 2	H361f	Suspected of damaging fertility.
Aquatic Acute 1	H400	Very toxic to aquatic life
Aquatic Chronic 1	H410	Very toxic to aquatic life with long-lasting effects.

2.2. Label elements

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

Hazard pictograms:

Signal word: Danger

Hazard statements:

H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H361f	Suspected of damaging fertility.
H410	Very toxic to aquatic life with long-lasting effects.

EUH071	Corrosive to the respiratory tract

Precautionary statements:

P260	Do not breathe dust/fume/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P273	Avoid release to the environment.

Hazard determining component(s) for labelling:

Contains: Reaction products of C18 (unsaturated) fatty acids with tetraethylenepentamine, 4-tert.-butylphenol, m-phenylenebis(methylamine), 2,2,4-trimethylhexane-1,6-diamine

2.3. Other hazards

The mixture does not meet the persistent (P), bioaccumulative (B) and toxic (T) criteria. The mixture is not PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Name	*EC No. Index No.*	*CAS No.*	*REACH Reg. No.*	*Content (%)*	*Classification according to 1272/2008 (CLP)*	
					Hazard categories[1]	*H-phrase(s)*[1]
Reaction products of C18 (unsaturated) fatty acids with tetraethylenepentamine	629-725-6 -	1226892-45-0	01-2119487006-38	<50%	Skin Corr. 1B Eye Dam. 1 Skin Sens. 1A Aquatic Acute 1[3] Aquatic Chronic 1	H314 H318 H317 H400 H410
tert.-butylphenol[2]	202-679-0 604-090-00-8	98-54-4	01-2119489419-21	<20%	Skin Irrit. 2 Eye Dam. 1 Repr. 2 Aquatic Chronic 1	H315 H318 H361f H410
m-phenylenebis (methylamine)[4]	216-032-5 -	1477-55-0	01-2119514687-32	<20%	Acute Tox. 4 Acute Tox. 4 Skin Corr. 1B Eye Dam. 1 Skin Sens. 1B Aquatic Chronic 3	H302 H332 H314 H318 H317 H412

					Acute Tox. 4 Skin Corr. 1B	H302 H314
2,2,4-trimethylhexane-1,6-diamine	247-063-2 -	25513-64-8	01-2119480150-50	<10%	Eye Dam. 1 Skin Sens. 1 Aquatic Chronic 3	H318 H317 H412

[1] – *See Section 16 for the full text of the abbreviations declared above.*
[2] – *Candidate list substance.*
[3] – *M factor is 10*
[4] – *EUH071 applies.*

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice: In case of accident or if you feel unwell, seek medical advice immediately. Show the label where possible. Take off immediately all contaminated, soaked clothing. Wash thoroughly (shower or bath). The person concerned must be removed from the danger zone and laid down. He/she should be transported lying down, in a semi-sitting position in case of shortness of breath. He/she should be kept at rest, covered and kept warm. He/she must not be left unattended.

4.1.1. Inhalation: The affected person should be taken out to fresh air and kept warm and calm. In case of respiratory distress or respiratory arrest give artificial respiration. Call a doctor immediately.

4.1.2. Skin contact: If substance has got into skin, immediately wash out with plenty of soap and water. In case of skin reaction, consult a doctor. The injured person should receive medical treatment immediately because untreated chemical burns are difficult to heal. In case of skin irritation, consult a doctor.

4.1.3. Eye contact: In case of contact with eyes, rinse immediately with plenty of running water for 10 to 15 minutes holding eyelids apart. Consult an eye doctor. Remove contact lenses, if present and easy to do. Continue rinsing. The intact eye must be protected.

4.1.4. Ingestion: Rinse mouth with plenty of water (only if the person is conscious) and seek medical advice immediately. Do NOT induce vomiting.

Protection of first-aider: Take care of self-protection.

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

In case of inhalation: irritation of the respiratory tract and lung.
In case of contact with skin: causes severe burns. May cause an allergic skin reaction.
On contact with eyes: causes serious eye damage.
On ingestion: causes severe internal burns. Gastrointestinal complaints. Abdominal pain. There is a risk of perforation of the esophagus and stomach (strong corrosive effect).

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

First aid, decontamination, symptomatic treatment. Follow-up for pneumonia and pulmonary edema.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: carbon dioxide (CO_2), dry powder, alcohol resistant foam, water spray.
Unsuitable extinguishing media: high volume water jet.

5.2. Special hazards arising from the substance or mixture

In case of fire may be liberated: nitrogen oxides (NO_x), carbon monoxide (CO), carbon dioxide (CO_2), ammonia (NH_3).

5.3. Advice for firefighters

Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training.

Hazardous thermal decomposition products:	Decomposition products may include the following substances: carbon dioxide, carbon monoxide, nitrogen oxides, ammonia.
Special protective equipment for firefighters:	Firefighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for firefighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Do not breathe vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.
6.1.2. For emergency responders: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials.

6.2. Environmental precautions

Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

6.3. Methods and material for containment and cleaning up

Stop leak if without risk. Move containers from spill area. Approach the release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilt product.

6.4. Reference to other sections

See Section 1 for emergency contact information.
See Section 8 for information on appropriate personal protective equipment.
See Section 13 for additional waste treatment information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Protective measures: Put on appropriate personal protective equipment (see Section 8). Do not get in eyes, on skin or on clothing. Do not breathe vapour or mist. Do not swallow. Avoid release to the environment. If during normal use the material presents a respiratory hazard, use only with adequate ventilation or wear appropriate respirator. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers may retain product residue and can be hazardous.

Advice on general occupational hygiene: Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

7.2. Conditions for safe storage, including any incompatibilities

Keep away from heat and flame. Keep container closed. Use with adequate ventilation. Avoid exposure to heat, light, and air for prolonged periods of time. Eliminate all ignition materials and incompatible materials.

7.3. Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this Section 7 has to be observed.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

DNEL values
4-tert-butylphenol (CAS: 98-54-4)
Workers: long-term exposure, dermal
Limit value: 0.071 mg/kg/day
Workers: long-term exposure, inhalation
Limit value: 0.5 mg/m^3
PNEC values
Reaction products of C18 (unsaturated) fatty acids with tetraethylenepentamine (CAS: 1226892-45-0)
PNEC freshwater: 0.0307 mg/l
PNEC sediment: 119.8 mg/kg dry weight
PNEC marine water: 0.00307 mg/l
PNEC soil: 9.44 mg/kg dry weight

8.2. Exposure controls

Appropriate engineering controls:
Provide good ventilation. If artificial air-exhaust or ventilation is not possible or not satisfactory, a protective mask should be worn. The application of technical measures and appropriate work procedures shall take precedence over the use of personal protective equipment.

Individual protection measures

Hygiene measures	Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection	Safety eyewear or mask complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If danger of inhalation exists, wear full facepiece respirator.
Skin protection	
Hand protection	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Use gloves approved to relevant standards e.g. EN 374 (Europe). Suitability and durability of a glove is dependent on usage, e.g. frequency and duration of contact, chemical resistance of glove material and dexterity of user. Always seek advice from glove suppliers.
Body protection	Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Other skin protection	Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.
Respiratory protection	In case of inadequate ventilation wear respiratory protection. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.
Environmental exposure controls	Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

a) Appearance:	liquid
b) Color:	yellow to brown
c) Odor:	characteristic
d) Melting point/freezing point:	not defined (mixture)
e) Boiling point or initial boiling point and boiling range:	no data
f) Flammability	ignitable
g) Lower and upper explosion limit:	not applicable (mixture)
h) Flash point:	no data
i) Autoignition temperature:	not applicable (mixture)
j) Decomposition temperature:	not applicable (mixture)
k) pH:	alkaline
l) Kinematic viscosity:	3000-4000 cps at 25°C
m) Solubility:	soluble in water
n) Partition coefficient n-octanol/water (log value)	not applicable (mixture)
o) Vapor pressure:	no data

p)	**Density and/or relative density:**	1,01 kg/dm^3 at room temperature
q)	**Relative vapor density:**	not applicable (mixture)
r)	**Particle characteristics**	not applicable (liquid)

9.2. Other data

No data.

SECTION 10: Stability and reactivity

10.1. Reactivity

No specific test data related to reactivity available for this product or its ingredients.

10.2. Chemical stability

Stable under normal storage conditions.

10.3. Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4. Conditions to avoid

To avoid exothermic reactions, keep away from oxidizing reagents and highly acidic materials.

10.5. Incompatible materials

Acids.

10.6. Hazardous decomposition products

No hazardous decomposition products if stored and handled as prescribed/indicated.

SECTION 11: Toxicological information

No test data is available for the product.

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

11.1.1. Acute toxicity:
Not classified according to the components.
11.1.2. Irritation/Corrosion
Causes severe skin burns and eye damage. Corrosive: may be absorbed through the skin.
11.1.3. Sensitisation
May cause sensitization by skin contact.
11.1.4. Germ cell mutagenicity
No data.
11.1.5. Carcinogenicity
No data.
11.1.6. Reproductive toxicity
Classified because of 4-tert-butylphenol content.
11.1.7. STOT – single exposure
No components are classified.
11.1.8. STOT – repeated exposure

No components are classified.

11.1.9. Aspiration hazard

No components are classified.

11.1.10. Toxicokinetics

No data.

11.1.11. Genetic toxicity

No data.

11.2. Information on other hazards

No specific data available.

SECTION 12: Ecological information

No test data is available for the product.

12.1. Toxicity

Data for Reaction products of C18 (unsaturated) fatty acids with tetraethylenepentamine (CAS: 1226892-45-0)

LC50 freshwater fish short-term:	0.19 mg/L
EC50 freshwater invertebrates short-term:	0.18 mg/L
NOEC freshwater invertebrates long-term:	0.307 mg/L
EC50 freshwater algae:	0.6125 mg/L
EC50 microorganisms:	109.4 mg/L

12.2. Persistence and degradability

Components are readily biodegradable.

12.3. Bioaccumulative potential

No data.

12.4. Mobility in soil

No data.

12.5. Results of PBT and vPvB assessment

The substances do not meet the criteria for PBT or vPvB according to REACH Regulation (EC No 1907/2006), Annex XIII.

12.6. Endocrine disrupting properties

None of the components is assessed as endocrine disruptors.

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal methods: The generation of waste should be avoided or minimised wherever possible. Significant quantities of waste product residues should not be disposed of via the foul sewer but processed in a suitable effluent treatment plant. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Disposal of

this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements.

Special precautions: This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

SECTION 14: Transport information

(ADR/RID/ADN, IMDG, IATA)

14.1. UN number or ID number UN2735

14.2. UN proper shipping name Polyamines, liquid, corrosive, n.o.s. (Aliphatic Amine, Polyamidoamine)

14.3. Transport hazard class(es) 8

14.4. Packing group II

14.5. Environmental hazards Yes

14.6. Special precautions for users

ADR/RID/ADN	IMDG	IATA
Tunnel code: (E)	EmS: (F-A, S-B)	PAX 851; CAO 855

14.7. Maritime transport in bulk according to IMO instruments

Not applicable.

SECTION 15: Regulatory information

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

The product is covered by the SEVESO III Directive (Directive 2012/18/EU) due to its environmental hazards.

15.2. Chemical safety assessment

Chemical safety assessment has not been carried out for the mixture.

SECTION 16: Other information

The information given corresponds with our actual knowledge and experience. This information is meant to describe our product in view of possible safety requirements. Classification of the mixture is based on the classification of components.

16.1. Indication of changes

This version is the first version of the datasheet.

16.2. Abbreviations and acronyms

CAS No.: Chemical Abstracts Service number
CLP: Regulation on Classification, Labelling and Packaging
DNEL: Derived no effect level
EC: European Commission

EC No.: EINECS and ELINCS number
~~EC50: Half maximal effective concentration~~
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
EU: European Union
LC50: Lethal concentration, 50%
PBT: Persistent, Bioaccumulative and Toxic
PNEC: Predicted no-effect concentration
REACH: The Registration, Evaluation, Authorisation and Restriction of Chemicals
STOT: Specific target organ toxicity
vPvB: Very Persistent and Very Bioaccumulative

16.3. Key literature references and sources for data

Safety data sheets, received from the raw materials suppliers.

16.4. Full text of abbreviations

H-Phrases

H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H318	Causes serious eye damage.
H332	Harmful if inhaled.
H361f	Suspected of damaging fertility.
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long-lasting effects.
H412	Harmful to aquatic life with long-lasting effects.
EUH071	Corrosive to the respiratory tract

P-Phrases

P260	Do not breathe dust/fumes/gas/mist/vapours/spray.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P301 + P330 + P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
P305 + P351 + P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P273	Avoid release to the environment.

Hazard classes

Acute Tox.	Acute toxicity
Aquatic Acute	Hazardous to the aquatic environment, acute
Aquatic Chronic	Hazardous to the aquatic environment, chronic
Eye Dam.	Serious eye damage
Repr.	Reproductive toxicity
Skin Corr.	Skin corrosion
Skin Irrit.	Skin irritation
Skin Sens.	Skin sensitization