

MATERIAL SAFETY DATA SHEET

Not classified as Hazardous according to criteria of Worksafe Australia

Catalyst – Ace 500

IDENTIFICATION

Product Name:	Catalyst - Ace 500
Product Use	Silicone compound which vulcanizes to an elastomer after the addition of a catalyst. It is used in moulding, reproduction, encapsulation and other applications
UN Number:	None allocated
Proper Shipping Name:	None allocated
Dangerous Goods Class:	None allocated
Subsidiary risk:	None allocated
Packing Group:	None allocated
Hazchem Code:	None allocated
Poison Schedule:	None allocated

PHYSICAL PROPERTIES

Appearance -	Physical state: Liquid. Form: Slightly viscous. Colour: Straw yellow.
Odour -	Strong.
pH:	Not Applicable.
Specific temperatures -	Decomposition temperature: > 200°C
Flammability characteristics -	Flash point: > 76°C (Closed cup, according to method AFNOR T 60103).
Oxidizing properties -	Non oxidizing material according to EC criteria.
Vapour pressure	<0.1 kPa at 20°C
Specific gravity -	Approx. 1010 kg/m ³ at 25°C
Solubility -	in water: Practically insoluble. in organic solvents: Miscible (in all proportions) with: - acetone - Aliphatic hydrocarbons. - aromatic hydrocarbons (toluene, xylene). - chlorinated solvents. Dispersible (partial solubilisation) in: - Alcohol (ethanol)
Kinematic viscosity.	approx. 8mm ² /s at 25°C.

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INGREDIENTS

Chemical nature:	Blend of: organic silicates + Organo tin compounds.
Components contributing to the hazard:	Dibutyltin carboxylates (CAS: 77-58-7 & 2781-10-4) : 10-15% - EEC Classification: Xn,N; R21/22-38-41-50/53 n-Propyl silicate (CAS:682-01-9) : 5-10%- EC Classification : Xi - R 36/38
Further Information	During using, on contact with humidity in the air releases: Ethanol (CAS: 64-17-5): 55% (Max.) – EEC Classification: F. 1-Propanol (CAS:71-23-8):<7% - EEC Classification: Xi; R41-67

HEALTH HAZARD INFORMATION

Adverse human health effects:	Irritating to skin. Risk of serious damage to eyes.
Environmental effects:	Contains a substance (Dilaurate de dibutyletain) classified As dangerous for the environment.
Physical and chemical hazards:	Combustible liquid. Explosive vapour/air mixtures may be formed above 110°C.
Classification/Specific hazards:	According to EC criteria, this product is not classified as an IRRITANT

FIRST AID

Inhalation.	Move the affected person away from the contaminated area and into the, fresh air. If necessary seek medical advice.
Skin contact:	Immediately remove contaminated clothing or footwear. Wipe off as much as possible (using a clean, soft, absorbent material). Wash immediately with plenty of soap and water.
Eye contact:	Immediately rinse with water for a prolonged period whilst keeping the eyes wide open. If irritation persists. Consult an eye specialist immediately, even if there are no visible injuries.
Ingestion:	NEVER attempt to induce vomiting. Consult doctor if necessary.

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FIRE - FIGHTING MEASURES

Extinguishing media - Suitable:	Alcohol –resistant foam. Powders. Carbon dioxide (CO ²).
Not suitable.	Strong water jet.
Specific hazards -	Combustible liquid. During combustion: Toxic and highly flammable gases are released (explosion hazard). Hazardous dust is released.
Specific fire fighting methods:	Do not breathe fumes. Contain the spread of extinguishing fluids (this product may be hazardous for the environment.) Cool down the containers/equipment exposed to heat with a water spray.
Protection of fire-fighters:	Self-contained breathing apparatus.

ACCIDENTAL RELEASE MEASURES

Personal precautions -	Do NOT attempt to take action WITHOUT suitable protective equipment. For further information refer to section 8 "Exposure-controls/personal protection". Mechanically ventilate the spillage area. Turn leaking containers leak-side up to prevent the escape of liquid.								
Environmental precautions -	Do NOT discharge into drains or rivers. Prevent the product from spreading into the environment.								
Methods for cleaning up -	<table border="0"> <tr> <td>Recovery:</td> <td>Collect up the product and place it in a spare container: - suitably labeled and tightly closed. Keep the recovered product for subsequent disposal.</td> </tr> <tr> <td>Neutralisation:</td> <td>Neutralize non-recoverable product with - dry sand or dry inert absorbent</td> </tr> <tr> <td>Cleaning/Decontamination:</td> <td>Decontaminate and wash the floor with: - an appropriate solvent. Then wash with plenty of water.</td> </tr> <tr> <td>Disposal:</td> <td>Incinerate contaminated materials at an authorized installation.</td> </tr> </table>	Recovery:	Collect up the product and place it in a spare container: - suitably labeled and tightly closed. Keep the recovered product for subsequent disposal.	Neutralisation:	Neutralize non-recoverable product with - dry sand or dry inert absorbent	Cleaning/Decontamination:	Decontaminate and wash the floor with: - an appropriate solvent. Then wash with plenty of water.	Disposal:	Incinerate contaminated materials at an authorized installation.
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HANDLING AND STORAGE

HANDLING -

- Technical measures: Ventilation.
- Measures: Avoid contact with moisture/humidity.
- Safe handling advice: Comply with instructions for use.

STORAGE -

Technical measures: Does not require any specific or particular technical measures.

- Storage conditions: Recommended: Store the container tightly closed and dry.
- To be avoided: Store away from incompatible materials.

Incompatible products: Strong oxidizing agents.

Packaging: Steel drums varnished with epikote.
 Tin drums varnished with epikote. (cardboard outer-packaging)
 Plastic bottles.

Packaging materials: Recommended: Coated steels.
 Plastic materials (polyethylene, polypropylene).

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering measures: Ensure good ventilation of the work station.

Control parameters

Occupational exposure limits

- Limits (France): Organo tin compounds, as Sn: VME : 0.1mg/m³
 Organo tin compounds, as Sn: VME : 0.2mg/m³
 Ethanol : WME : 1900 mg/m³ (1000 ppm).
 1-Propanol : WME 500 mg/m³ (200 ppm).
- Limits (U.S.A. / A.C.G.I.H.) Organo tin compounds, as Sn: TLV (TWA) : 0.1mg/m³
 Organo tin compounds, as Sn: TLV (TWA) : 0.2mg/m³
 Ethanol : TLV (TWA) : 1880 mg/m³ (1000 ppm).
 1-Propanol : TLV (TWA) : 492 mg/m³ (200 ppm).
- Limits (UK) Tin compounds, organic (as Sn):
 OES: 0.1 mg/m³ (Long term exposure limit – 8 hr TWA reference period)
 OES: 0.2 mg/m³ (Short term exposure limit – 15 minute reference period)
 Sk notation – can be absorbed through the skin
 Ethanol:
 OES: 1000 ppm (1920 mg/m³). (Long term exposure limit – 8 hr TWA reference period).

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Propan-1-ol.

EXPOSURE CONTROLS/PERSONAL PROTECTION (CONT.)

- Limits (UK) (cont.)	OES: 200 ppm or 500 mg/m ³ (Long term exposure limit – 8 hr TWA reference period) OES: 250 ppm or 625 mg/m ³ (Short term exposure limit – 15 minute reference period)
Surveillance procedures:	Measure the concentration in the atmosphere.
Personal protective equipment:	
- Hand protection:	Protective gloves made of rubber.
- Eye protection:	Safety spectacles.
Collective emergency equipment:	Eye fountain. Safety shower

STABILITY AND REACTIVITY

Stability:	Stable at room temperature.
Hazardous reactions:	Materials to avoid: Strong oxidizing agents. Hazardous decomposition products: Reacts slowly on contact with water or humidity releasing: Ethanol – Quantity potentially released: 55% of the weight of the product. Dibutyltin oxide – Quantity potentially released: 5% of the weight of the product. On combustion forms: (Carbon oxides (CO + CO ₂)). (Silica). (Tin oxide)

TOXICOLOGICAL INFORMATION

Acute toxicity:	LD 50 oral (Rat).. >2000 mg/kg. (Unpublished internal reports).
Local effects:	Irritating to the skin. Extremely irritating to the eyes. May cause severe ocular lesions.

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ECOLOGICAL INFORMATION

MOBILITY:

Precipitation: Slightly soluble product, readily forms deposits.

Expected behaviour of the product: Ultimate destruction of the decomposition products:
 Water : 50%.
 Soil : 50%.

DEGRADABILITY:

Abiotic degradation
 - Hydrolysis

Slowly hydrolyses on contact with water.

BIODEGRADABILITY

- Ultimate aerobic biodegradability:

The product formed on hydrolysis (Ethanol) :
 Readily biodegradable.

Persistence:

The mineral component is NOT degradable. (Silicic acid).

BIOACCUMULATION:

Octanol/ water partition coefficient: Dibutyltin carboxylates:
 No information available.

ECOTOXICITY:

Effects on the aquatic environment: Dibutyltin dilaurate:
 EC 50 (Daphnia: Daphnia magna)/48 h: 0.23 mg/l.
 LC 50 (Fish: Brachydanio rerio) /96 h: 2.9 mg/l.
 (Unpublished internal reports)
 May cause long-term adverse effects in the aquatic environment.

DISPOSAL CONSIDERATIONS

WASTE FROM RESIDUES:

Prohibition: Discharging waste into rivers and drains is forbidden.

Destruction/Disposal:

Incinerate at a licensed installation.
 Conform to current legislation, regulations and orders.

CONTAMINATED PACKAGING:

Decontamination/cleaning: Allow it to drain thoroughly.
 Rinse with an appropriate solvent.
 Recover the solvent used for rinsing and incinerate at a licensed site.

Destruction/Disposal:

Incinerate at a licensed installation.
 Entrust the cardboard packaging to a licensed waste-contractor.

NOTE:

The user's attention is drawn to the possible existence of local regulations regarding disposal.

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TRANSPORT INFORMATION

INTERNATIONAL REGULATIONS:

Land:	
Railroad (RID/ADR):	NOT restricted.
Sea IMO/IMDG):	Class: 9. UN Number: 3082. Labeling: 9 MATIERES ET OBJECTS DANGEREUX DIVERS + POLLUANT MARIN. Packaging group: III Marine pollutant: YES Emergency schedule (EmS) : None. Medical First Aid Guide (MFAG) : None.
Air (ICAO-IATA):	NOT restricted.
OTHER REGULATIONS	
- United Kingdom: Rail/Road:	NOT restricted.

NOTE: The above regulatory prescriptions are those valid on the date of publication of this sheet.
 Given the possible evolution of transport regulations for hazardous materials it would be advisable to check their validity.

REGULATORY INFORMATION

LABELING	
EC regulations:	Mandatory labeling (self-classification) of hazardous preparations: Applicable.
- Classifications/Symbols:	- IRRITANT (Xi)
- R phrases:	R38: Irritating to skin. R41: Risk of serious damage to eyes.
- S phrases:	S 26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S37/39: Wear suitable gloves and eye/face protection.

>> Further Regulations
 United Kingdom: Handle in accordance with relevant British legislation:
 Chemical Hazard Information and Packaging for Supply Regulations
 Control of Substances Hazardous to Health Regulations
 Environment Hygiene Guidance: EH/40 Occupational Exposure Limits (revised annually).
 Environmental Protection Act
 Collection and Disposal of Waste Regulations

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NOTE: The regulatory information given above only indicates the Principal regulations specifically applicable to the product described in the Material Safety Data Sheet. The user's attention is drawn to the possible existence of additional provisions which complete these regulations. Refer to all applicable national, international and local regulations or provisions.

OTHER INFORMATION

Uses

- | | |
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| - Prohibited uses: | This product is only intended for industrial use. |
| - European inventory (EINECS, ELINCS): | All the constituents of this preparation are registered in the EINECS inventory. |
| - American inventory (TSCA): | All the components of this preparation are registered in the TSCA inventory. |

CONTACT POINT

Contact Point

Technical Manager 61 03 9579 2044

Disclaimer The information herein is to the best of our knowledge, correct and complete. It describes the safety requirements for this product and should not be construed as guaranteeing specific properties. Since methods and conditions are beyond our control we do not accept liability for any damages resulting from the use of or reliance on, this information in inappropriate contexts.

This material safety data sheet should be used in conjunction with technical sheets. It does not replace them. The information given is based on our knowledge of this product, at the time of publication. It is given in good faith. The attention of the user is drawn to the possible risks incurred by using the product for any other purpose other than that for which it was intended. This does not in any way excuse the user from knowing and applying all the regulations governing his activity. It is the sole responsibility of the user to take all precautions required in handling the product. The aim of the mandatory regulations mentioned is to help the user to fulfill his obligations regarding

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the use of hazardous products. This information is not exhaustive. This does not exonerate the user from ensuring that legal obligations, other than those mentioned, relating to the use and storage of the product, do not exist. This is solely his responsibility.