

Safety data sheet

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

1.1. Product identifier

Product name CATALIZZATORE S

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

Intended use HARDENER FOR SILICONE RUBBERS

Identified Uses	Industrial	Professional	Consumer
SU 22	-	✓	-
SU 3	✓	-	-

1.3. Details of the supplier of the safety data sheet

Name POOLKEMIE S.r.l.
 Full address C.so Moncalieri, 448
 District and Country 10040 Torino (TO)
 Italia
 Tel. +39 011-3473370
 Fax +39 011-3913517

e-mail address of the competent person responsible for the Safety Data Sheet info@poolkemie.it

Product distribution by POOLKEMIE S.r.l.

1.4. Emergency telephone number

For urgent inquiries refer to

Numeri telefonici dei principali Centri Antiveleni italiani (attivi 24/24 ore)

Centro Antiveleni di Pavia tel. 0382 24444 (CAV Centro Nazionale di Informazione Tossicologica - Pavia)

Centro Antiveleni di Milano tel. 02 66101029 (CAV Ospedale Niguarda Ca' Granda - Milano)

Centro Antiveleni di Bergamo tel. 800 883300 (CAV Az. Osp. Papa Giovanni XXII - Bergamo)

Centro Antiveleni di Firenze tel. 055 7947819 (CAV Ospedale Careggi - Firenze)

Centro Antiveleni di Roma tel. 06 3054343 (CAV Policlinico Gemelli - Roma)

Centro Antiveleni di Roma tel. 06 49978000 (CAV Policlinico Umberto I - Roma)

Centro Antiveleni di Napoli tel. 081 7472870 (CAV Ospedale Cardarelli - Napoli)

Centro antiveleni di Foggia tel. 0881-732326 (CAV Az.Osp.Univ. Foggia)

SECTION 2. Hazards identification.

2.1. Classification of the substance or mixture.

The product is classified as hazardous pursuant to the provisions set forth in EC Regulation 1272/2008 (CLP) (and subsequent amendments and supplements). The product thus requires a safety datasheet that complies with the provisions of EC Regulation 1907/2006 and subsequent amendments.

Any additional information concerning the risks for health and/or the environment are given in sections 11 and 12 of this sheet.

Hazard classification and indication:

Flammable liquid, category 3	H226	Flammable liquid and vapour.
Reproductive toxicity, category 2	H361d	Suspected of damaging the unborn child.
Specific target organ toxicity - repeated exposure, category 2	H373	May cause damage to organs through prolonged or repeated exposure.
Eye irritation, category 2	H319	Causes serious eye irritation.
Specific target organ toxicity - single exposure, category 3	H335	May cause respiratory irritation.

3

	POOLKEMIE S.r.l.	
POOLKEMIE	CATALIZZATORE S	Revision nr.15 Dated 03/02/2016 Printed on 29/02/2016 Page n.2/9

SECTION 2. Hazards identification. ... / >>

2.2. Label elements.

Hazard labelling pursuant to EC Regulation 1272/2008 (CLP) and subsequent amendments and supplements.

Hazard pictograms:



Signal words: Warning

Hazard statements:

H226	Flammable liquid and vapour.
H361d	Suspected of damaging the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.

Precautionary statements:

P201	Obtain special instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233	Keep container tightly closed.
P280	Wear protective gloves / clothing and eye / face protection.
P304+P340	IF INHALED: remove person to fresh air and keep comfortable for breathing.
P308+P313	IF exposed or concerned: Get medical advice / attention.
P370+P378	In case of fire: use carbon dioxide/foam/ powder to extinguish.

Contains: DIMETHYLBIS ((1-OXONEODECYL) OXY) STANNANE
ETHYL SILICATE
Ethyl polysilicate

2.3. Other hazards.

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

SECTION 3. Composition/information on ingredients.

3.1. Substances.

Information not relevant.

3.2. Mixtures.

Contains:

Identification.	Conc. %.	Classification 1272/2008 (CLP).
ETHYL SILICATE		
CAS. 78-10-4	15 - 20	Flam. Liq. 3 H226, Acute Tox. 4 H332, Eye Irrit. 2 H319, STOT SE 3 H335
EC. 201-083-8		
INDEX. 014-005-00-0		
Ethyl polysilicate		
CAS. 11099-06-2	10 - 15	Flam. Liq. 3 H226, Acute Tox. 4 H332, Eye Irrit. 2 H319, STOT SE 3 H335
EC. 234-324-0		
INDEX.		
DIMETHYLBIS ((1-OXONEODECYL) OXY) STANNANE		
CAS. 68928-76-7	5 - 10	Repr. 2 H361d, Acute Tox. 4 H302, STOT RE 1 H372, Aquatic Chronic 3 H412
EC. 273-028-6		
INDEX.		

Note: Upper limit is not included into the range.

The full wording of hazard (H) phrases is given in section 16 of the sheet.

	POOLKEMIE S.r.l.	
POOLKEMIE	CATALIZZATORE S	Revision nr.15 Dated 03/02/2016 Printed on 29/02/2016 Page n.3/9

SECTION 4. First aid measures.

4.1. Description of first aid measures.

EYES: Remove contact lenses, if present. Wash immediately with plenty of water for at least 15 minutes, opening the eyelids fully. If problem persists, seek medical advice.

SKIN: Remove contaminated clothing. Wash immediately with plenty of water. If irritation persists, get medical advice/attention. Wash contaminated clothing before using it again.

INHALATION: Remove to open air. In the event of breathing difficulties, get medical advice/attention immediately.

INGESTION: Get medical advice/attention. Induce vomiting only if indicated by the doctor. Never give anything by mouth to an unconscious person, unless authorised by a doctor.

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.

Information not available.

SECTION 5. Firefighting measures.

5.1. Extinguishing media.

SUITABLE EXTINGUISHING EQUIPMENT

Extinguishing substances are: carbon dioxide, foam, chemical powder. For product loss or leakage that has not caught fire, water spray can be used to disperse flammable vapours and protect those trying to stem the leak.

UNSUITABLE EXTINGUISHING EQUIPMENT

Do not use jets of water. Water is not effective for putting out fires but can be used to cool containers exposed to flames to prevent explosions.

5.2. Special hazards arising from the substance or mixture.

HAZARDS CAUSED BY EXPOSURE IN THE EVENT OF FIRE

Excess pressure may form in containers exposed to fire at a risk of explosion. Do not breathe combustion products.

5.3. Advice for firefighters.

GENERAL INFORMATION

Use jets of water to cool the containers 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 contaminated water used for extinction and the remains of the fire according to applicable regulations.

SPECIAL PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS

Normal fire fighting clothing i.e. fire kit (BS EN 469), gloves (BS EN 659) and boots (HO specification A29 and A30) in combination with self-contained open circuit positive pressure compressed air breathing apparatus (BS EN 137).

SECTION 6. Accidental release measures.

6.1. Personal precautions, protective equipment and emergency procedures.

Block the leakage if there is no hazard.

Wear suitable protective equipment (including personal protective equipment referred to under Section 8 of the safety data sheet) to prevent any contamination of skin, eyes and personal clothing. These indications apply for both processing staff and those involved in emergency procedures.

6.2. Environmental precautions.

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

6.3. Methods and material for containment and cleaning up.

Collect the leaked product into a suitable container. Evaluate the compatibility of the container to be used, by checking section 10. Absorb the remainder with inert absorbent material.

Make sure the leakage site is well aired. Check incompatibility for container material in section 7. Contaminated material should be disposed of in compliance with the provisions set forth in point 13.

6.4. Reference to other sections.

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

	POOLKEMIE S.r.l.	
POOLKEMIE	CATALIZZATORE S	Revision nr.15 Dated 03/02/2016 Printed on 29/02/2016 Page n. 4/9

SECTION 7. Handling and storage.

7.1. Precautions for safe handling.

Keep away from heat, sparks and naked flames; do not smoke or use matches or lighters. Without adequate ventilation, vapours may accumulate at ground level and, if ignited, catch fire even at a distance, with the danger of backfire. Avoid bunching of electrostatic charges. Do not eat, drink or smoke during use. Remove any contaminated clothes and personal protective equipment before entering places in which people eat. Avoid leakage of the product into the environment.

7.2. Conditions for safe storage, including any incompatibilities.

Store only in the original container. Store in a well ventilated place, keep far away from sources of heat, naked flames and sparks and other sources of ignition. Keep containers away from any incompatible materials, see section 10 for details.

7.3. Specific end use(s).

Information not available.

SECTION 8. Exposure controls/personal protection.

8.1. Control parameters.

Regulatory References:

AUS	Österreich	Grenzwerteverordnung 2011 - GKV 2011
DEU	Deutschland	MAK-und BAT-Werte-Liste 2012
ESP	España	INSHT - Límites de exposición profesional para agentes químicos en España 2015
FRA	France	JORF n°0109 du 10 mai 2012 page 8773 texte n° 102
GRC	Ελλάδα	ΕΦΗΜΕΡΙΣ ΤΗΣ ΚΥΒΕΡΝΗΣΕΩΣ -ΤΕΥΧΟΣ ΠΡΩΤΟ Αρ. Φύλλου 19 - 9 Φεβρουαρίου 2012
IRL	Éire	Code of Practice Chemical Agent Regulations 2011
	TLV-ACGIH	ACGIH 2014

ETHYL SILICATE

Threshold Limit Value.

Type	Country	TWA/8h		STEL/15min	
		mg/m ³	ppm	mg/m ³	ppm
MAK	AUS	170	20	340	40
AGW	DEU	12	1,4	12	1,4
MAK	DEU	86	10	86	10
VLA	ESP	87	10		
VLEP	FRA	85	10		
TLV	GRC	170	20	255	30
OEL	IRL	85	10	255	30
TLV-ACGIH		85	10		

Legend:

(C) = CEILING ; INHAL = Inhalable Fraction ; RESP = Respirable Fraction ; THORA = Thoracic Fraction.

8.2. Exposure controls.

As the use of adequate technical equipment must always take priority over personal protective equipment, make sure that the workplace is well aired through effective local aspiration.

When choosing personal protective equipment, ask your chemical substance supplier for advice.

Personal protective equipment must be CE marked, showing that it complies with applicable standards. Provide an emergency shower with face and eye wash station.

Exposure levels must be kept as low as possible to avoid significant build-up in the organism. Manage personal protective equipment so as to guarantee maximum protection (e.g. reduction in replacement times).

HAND PROTECTION

Protect hands with category III work gloves (see standard EN 374).

The following should be considered when choosing work glove material: compatibility, degradation, failure time and permeability.

The work gloves' resistance to chemical agents should be checked before use, as it can be unpredictable. The gloves' wear time depends on the duration and type of use.

SKIN PROTECTION

Wear category II professional long-sleeved overalls and safety footwear (see Directive 89/686/EEC and standard EN ISO 20344). Wash body with soap and water after removing protective clothing.

Consider the appropriateness of providing antistatic clothing in the case of working environments in which there is a risk of explosion.

EYE PROTECTION

Wear airtight protective goggles (see standard EN 166).

	POOLKEMIE S.r.l.	
POOLKEMIE	CATALIZZATORE S	Revision nr.15 Dated 03/02/2016 Printed on 29/02/2016 Page n. 5/9

SECTION 8. Exposure controls/personal protection. ... / >>

RESPIRATORY PROTECTION

If the threshold value (e.g. TLV-TWA) is exceeded for the substance or one of the substances present in the product, use a mask with a type A filter whose class (1, 2 or 3) must be chosen according to the limit of use concentration. (see standard EN 14387). In the presence of gases or vapours of various kinds and/or gases or vapours containing particulate (aerosol sprays, fumes, mists, etc.) combined filters are required.

Respiratory protection devices must be used if the technical measures adopted are not suitable for restricting the worker's exposure to the threshold values considered. The protection provided by masks is in any case limited.

If the substance considered is odourless or its olfactory threshold is higher than the corresponding TLV-TWA and in the case of an emergency, wear open-circuit compressed air breathing apparatus (in compliance with standard EN 137) or external air-intake breathing apparatus (in compliance with standard EN 138). For a correct choice of respiratory protection device, see standard 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.

SECTION 9. Physical and chemical properties.

9.1. Information on basic physical and chemical properties.

Appearance	liquid	
Colour	milky	
Odour	aromatic	
Odour threshold.	Not available.	
pH.	Not available.	
Melting point / freezing point.	Not available.	
Initial boiling point.	Not available.	
Boiling range.	Not available.	
Flash point.	23 ≤ T ≤ 60	°C.
Evaporation Rate	Not available.	
Flammability of solids and gases	Not available.	
Lower inflammability limit.	Not available.	
Upper inflammability limit.	Not available.	
Lower explosive limit.	Not available.	
Upper explosive limit.	Not available.	
Vapour pressure.	Not available.	
Vapour density	Not available.	
Relative density.	0,950	Kg/l
Solubility	insoluble in water	
Partition coefficient: n-octanol/water	Not available.	
Auto-ignition temperature.	Not available.	
Decomposition temperature.	Not available.	
Viscosity	5-10	mPas
Explosive properties	Not available.	
Oxidising properties	Not available.	

9.2. Other information.

VOC (Directive 1999/13/EC) :	17,80 %	-	169,10	g/litre.
VOC (volatile carbon) :	8,20 %	-	77,92	g/litre.

SECTION 10. Stability and reactivity.

10.1. Reactivity.

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.

The vapours may also form explosive mixtures with the air.

10.4. Conditions to avoid.

Avoid overheating. Avoid bunching of electrostatic charges. Avoid all sources of ignition.

10.5. Incompatible materials.

Information not available.

10.6. Hazardous decomposition products.

In the event of thermal decomposition or fire, gases and vapours that are potentially dangerous to health may be released.

	POOLKEMIE S.r.l.	
POOLKEMIE	CATALIZZATORE S	Revision nr.15 Dated 03/02/2016 Printed on 29/02/2016 Page n. 6/9

SECTION 11. Toxicological information.

11.1. Information on toxicological effects.

In the absence of experimental data for the product itself, health hazards are evaluated according to the properties of the substances it contains, using the criteria specified in the applicable regulation for classification.

It is therefore necessary to take into account the concentration of the individual hazardous substances indicated in section 3, to evaluate the toxicological effects of exposure to the product.

This product must be handled carefully because of its possible teratogenic effects, which may be toxic and damage the foetus development.

This product may cause functional disorders or morphological mutations after repeated or prolonged exposure and/or may accumulate inside the human body and is thus graded as dangerous.

Acute effects: stinging eyes. Symptoms may include: rubescence, edema, pain and lachrymation.

Ingestion may cause health problems, including stomach pain and sting, nausea and sickness.

Acute effects: inhalation of this product may irritate the lower and upper respiratory tract and cause cough and respiratory disorders; at higher concentrations it can also cause pulmonary edema. Ingestion may cause health problems, including stomach pain and sting, nausea and sickness.

DIMETHYLBIS (1-OXONEODECYL) OXY) STANNANE

LD50 (Oral). 849 mg/kg rat

LD50 (Dermal). > 2000 mg/kg rat

SECTION 12. Ecological information.

No specific data are available for this product. Handle it according to good working practices. Avoid littering. Do not contaminate soil, sewers and waterways. Inform the competent authorities, should the product reach waterways or sewers or contaminate soil or vegetation. Please take all the proper measures to reduce harmful effects on aquifers.

12.1. Toxicity.

Information not available.

12.2. Persistence and degradability.

ETHYL SILICATE

Solubility in water. mg/l 1000 - 10000

Rapidly biodegradable.

12.3. Bioaccumulative potential.

ETHYL SILICATE

Partition coefficient: n-octanol/water. 3,18

BCF. 3,16

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.

SECTION 13. Disposal considerations.

13.1. Waste treatment methods.

Reuse, when possible. Product residues should be considered special hazardous waste. The hazard level of waste containing this product should be evaluated according to applicable regulations.

Disposal must be performed through an authorised waste management firm, in compliance with national and local regulations. Waste transportation may be subject to ADR restrictions.

CONTAMINATED PACKAGING

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

	POOLKEMIE S.r.l.	
POOLKEMIE	CATALIZZATORE S	Revision nr.15 Dated 03/02/2016 Printed on 29/02/2016 Page n. 7/9

SECTION 14. Transport information.

14.1. UN number.

ADR / RID, IMDG, IATA: 1993

The product, if packaged in packages of less than 450 litres, is not subject to ADR regulations as stated in 2.2.3.1.5.

The product, if packaged in packages of less than 30 litres, is not subject to obligations relating to marking, labelling and package testing in accordance with 2.3.2.5 of the IMDG CODE.

14.2. UN proper shipping name.

ADR / RID: FLAMMABLE LIQUID, N.O.S.(ETHYL SILICATE; ETHYL POLYSILICATE)
 IMDG: FLAMMABLE LIQUID, N.O.S.(ETHYL SILICATE; ETHYL POLYSILICATE)
 IATA: FLAMMABLE LIQUID, N.O.S.(ETHYL SILICATE; ETHYL POLYSILICATE)

14.3. Transport hazard class(es).

ADR / RID: Class: 3 Label: 3



IMDG: Class: 3 Label: 3



IATA: Class: 3 Label: 3



14.4. Packing group.

ADR / RID, IMDG, IATA: III

14.5. Environmental hazards.

ADR / RID: NO
 IMDG: NO
 IATA: NO

14.6. Special precautions for user.

ADR / RID:	HIN - Kemler: 30 Special Provision: -	Limited Quantities 5 L	Tunnel restriction code (D/E)
IMDG:	EMS: F-E, <u>S-E</u>	Limited Quantities 5 L	
IATA:	Cargo: Pass.: Special Instructions:	Maximum quantity: 220 L Maximum quantity: 60 L A3	Packaging instructions: 366 Packaging instructions: 355

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code.

Information not relevant.

SECTION 15. Regulatory information.

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

Seveso category. 6

Restrictions relating to the product or contained substances pursuant to Annex XVII to EC Regulation 1907/2006.

Product.
Point. 3 - 40

Substances in Candidate List (Art. 59 REACH).

	POOLKEMIE S.r.l.	
POOLKEMIE	CATALIZZATORE S	Revision nr.15 Dated 03/02/2016 Printed on 29/02/2016 Page n. 8/9

SECTION 15. Regulatory information. ... / >>

None.

Substances subject to authorisation (Annex XIV REACH).

None.

Substances subject to exportation reporting pursuant to (EC) Reg. 649/2012:

None.

Substances subject to the Rotterdam Convention:

None.

Substances subject to the Stockholm Convention:

None.

Healthcare controls.

Workers exposed to this chemical agent must not undergo health checks, provided that available risk-assessment data prove that the risks related to the workers' health and safety are modest and that the 98/24/EC directive is respected.

15.2. Chemical safety assessment.

No chemical safety assessment has been processed for the mixture and the substances it contains.

SECTION 16. Other information.

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

Flam. Liq. 3	Flammable liquid, category 3
	Reproductive toxicity, category 2
Acute Tox. 4	Acute toxicity, category 4
STOT RE 1	Specific target organ toxicity - repeated exposure, category 1
STOT RE 2	Specific target organ toxicity - repeated exposure, category 2
Eye Irrit. 2	Eye irritation, category 2
STOT SE 3	Specific target organ toxicity - single exposure, category 3
Aquatic Chronic 3	Hazardous to the aquatic environment, chronic toxicity, category 3
H226	Flammable liquid and vapour.
H361d	Suspected of damaging the unborn child.
H302	Harmful if swallowed.
H332	Harmful if inhaled.
H372	Causes damage to organs through prolonged or repeated exposure.
H373	May cause damage to organs through prolonged or repeated exposure.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H412	Harmful to aquatic life with long lasting effects.

LEGEND:

- ADR: European Agreement concerning the carriage of Dangerous goods by Road
- CAS NUMBER: Chemical Abstract Service Number
- CE50: Effective concentration (required to induce a 50% effect)
- CE NUMBER: Identifier in ESIS (European archive of existing substances)
- CLP: EC Regulation 1272/2008
- DNEL: Derived No Effect Level
- EmS: Emergency Schedule
- GHS: Globally Harmonized System of classification and labeling of chemicals
- IATA DGR: International Air Transport Association Dangerous Goods Regulation
- IC50: Immobilization Concentration 50%
- IMDG: International Maritime Code for dangerous goods
- IMO: International Maritime Organization
- INDEX NUMBER: Identifier in Annex VI of CLP
- LC50: Lethal Concentration 50%
- LD50: Lethal dose 50%
- OEL: Occupational Exposure Level
- PBT: Persistent bioaccumulative and toxic as REACH Regulation
- PEC: Predicted environmental Concentration
- PEL: Predicted exposure level
- PNEC: Predicted no effect concentration
- REACH: EC Regulation 1907/2006
- RID: Regulation concerning the international transport of dangerous goods by train
- TLV: Threshold Limit Value

	POOLKEMIE S.r.l.	
POOLKEMIE	CATALIZZATORE S	Revision nr.15 Dated 03/02/2016 Printed on 29/02/2016 Page n. 9/9

SECTION 16. Other information. ... / >>

- TLV CEILING: Concentration that should not be exceeded during any time of occupational exposure.
- TWA STEL: Short-term exposure limit
- TWA: Time-weighted average exposure limit
- VOC: Volatile organic Compounds
- vPvB: Very Persistent and very Bioaccumulative as for REACH Regulation
- WGK: Water hazard classes (German).

GENERAL BIBLIOGRAPHY

1. Regulation (EU) 1907/2006 (REACH) of the European Parliament
2. Regulation (EU) 1272/2008 (CLP) of the European Parliament
3. Regulation (EU) 790/2009 (I Atp. CLP) of the European Parliament
4. Regulation (EU) 453/2010 of the European Parliament
5. Regulation (EU) 286/2011 (II Atp. CLP) of the European Parliament
6. Regulation (EU) 618/2012 (III Atp. CLP) of the European Parliament
7. Regulation (EU) 487/2013 (IV Atp. CLP) of the European Parliament
8. Regulation (EU) 944/2013 (V Atp. CLP) of the European Parliament
9. Regulation (EU) 605/2014 (VI Atp. CLP) of the European Parliament

- 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
- ECHA website

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.

Changes to previous review:

The following sections were modified:

02 / 08 / 09 / 12 / 14 / 15.