Safety data sheet

as per regulation 1907/2006/EC (REACH) as amended and supplemented

Printing date 24.10.2019 *Version number 132* *Revision: 27.09.2019*

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

· **1.1 Product identifier**

· **Product code** LOB810

· **Trade name: CATALYST FOR PE V**

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

Paint and relative material only for wood

· **Application of the substance / the mixture** For professional use

· **1.3 Details of the supplier of the safety data sheet**

· **Manufacturer/Supplier:**

IVM Chemicals srl

Viale della Stazione 3 - 27020 Parona (PV) Italy tel +39 038425441

· **Further information obtainable from:**

Environmental Health and safety office

hseoffice@ivmchemicals.com

· **1.4 Emergency telephone number:**

From 8.30 to 17.30 0039 038 425 441

Out of the above mentioned hours, Saturdays and Sundays and during periods of closure for holidays please call: 0039 0384 254491

SECTION 2: Hazards identification

· **2.1 Classification of the substance or mixture**

· **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Org. Perox. D H242 Heating may cause a fire.



GHS05 corrosion

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

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Acute Tox. 4 H332 Harmful if inhaled.

· **2.2 Label elements**

· **Labelling according to Regulation (EC) No 1272/2008**

The product is classified and labelled according to the CLP regulation.

· **Hazard pictograms**



GHS02 GHS05 GHS07

· **Signal word** Danger

· **Hazard-determining components of labelling:**

2-Butanone, peroxide

(Contd. on page 2)

Safety data sheet
as per regulation 1907/2006/EC (REACH) as amended and supplemented

Printing date 24.10.2019 *Version number 132* *Revision: 27.09.2019*

Product code LOB810
Trade name: CATALYST FOR PE V

(Contd. of page 1)

· ***Hazard statements***
H242 Heating may cause a fire.
H302+H332 Harmful if swallowed or if inhaled.
H314 Causes severe skin burns and eye damage.
· ***Precautionary statements***
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P234 Keep only in original container.
P280 Wear protective gloves/protective clothing/eye protection/face protection.
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.
P310 Immediately call a POISON CENTER/doctor.
P370+P378 In the event of a fire: Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide to extinguish.

· **2.3 Other hazards**
· ***Results of PBT and vPvB assessment***
· ***PBT:*** Not applicable.
· ***vPvB:*** Not applicable.

SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterisation: Mixtures**
· ***Description:*** Mixture: consisting of the following components.

· ***Dangerous components:***		
CAS: 1338-23-4 EINECS: 215-661-2 Reg.nr.: 01-2119514691-43-XXXX	2-Butanone, peroxide Org. Perox. D, H242 Skin Corr. 1B, H314; Eye Dam. 1, H318 Acute Tox. 4, H302; Acute Tox. 4, H332	30-49.99%
CAS: 78-93-3 EINECS: 201-159-0 Reg.nr.: 01-2119457290-43-XXXX	butanone Flam. Liq. 2, H225 Eye Irrit. 2, H319; STOT SE 3, H336	2.5-4.99%

· ***Additional information:*** For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

· **4.1 Description of first aid measures**
· ***General information:***
Immediately remove any clothing soiled by the product.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
personal protective equipment for first aid responders is recommended. (please see section 8)
· ***After inhalation:***
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness place patient stably in side position for transportation.
· ***After skin contact:***
Remove contaminated clothing.
Immediately wash with water and soap, or a recognized skin cleanser, and rinse thoroughly.
· ***After eye contact:***
Rinse opened eye for several minutes under running water. Then consult a doctor.

(Contd. on page 3)

(Contd. of page 2)

· ***After swallowing:***
Do not induce vomiting; call for medical help immediately.
Call for a doctor immediately.
Drink plenty of water and provide fresh air. Call for a doctor immediately.

· **4.2 Most important symptoms and effects, both acute and delayed**
For symptoms and effects caused by substances, see chap. 11th
No further relevant information available.

· **4.3 Indication of any immediate medical attention and special treatment needed**
No further relevant information available.

SECTION 5: Firefighting measures

· **5.1 Extinguishing media**
· ***Suitable extinguishing agents:*** *Use fire extinguishing methods suitable to surrounding conditions.*

· **5.2 Special hazards arising from the substance or mixture**
Formation of toxic gases is possible during heating or in case of fire.
No further relevant information available.

· **5.3 Advice for firefighters**
Cool by spraying with water the containers to prevent product decomposition and the development of substances potentially hazardous for health and also, in the case of closed containers exposed to flames to prevent explosions.
· ***Protective equipment:***
Hardhat with visor, fireproof clothing, suitable gloves and if necessary mouth respiratory protective device.

SECTION 6: Accidental release measures

· **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Keep away from ignition sources.

· **6.2 Environmental precautions:** *Do not allow to enter sewers/ surface or ground water.*

· **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralising agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.

· **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

· **7.1 Precautions for safe handling** *Ensure good ventilation/exhaustion at the workplace.*
· ***Information about fire - and explosion protection:*** *Keep ignition sources away - Do not smoke.*

· **7.2 Conditions for safe storage, including any incompatibilities**
· ***Storage:***
· ***Requirements to be met by storerooms and receptacles:***
Observe the label precautions, the expiration date for the use, if indicated, is from delivery date.
In cases there is no reported deadline, it means that the product must be used within 8

(Contd. on page 4)

(Contd. of page 3)

months.

· **Information about storage in one common storage facility:**
Do not store together with reducing agents, heavy-metal compounds, acids and alkalis.

· **Further information about storage conditions:** Keep container tightly sealed.

· **7.3 Specific end use(s)**
Those typical of the product and the instructions in the data sheet if required.

*

SECTION 8: Exposure controls/personal protection

· **Additional information about design of technical facilities:** No further data; see item 7.

· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**	
131-11-3 dimethyl phthalate (50-74.99%)	
WEL	Short-term value: 10 mg/mį Long-term value: 5 mg/mį
78-93-3 butanone (2.5-4.99%)	
WEL	Short-term value: 899 mg/mį, 300 ppm Long-term value: 600 mg/mį, 200 ppm Sk, BMGV

· **DNELs**		
78-93-3 butanone		
Inhalative	DNEL	600 mg/mc (Workers)
Irritation of skin	DNEL	1,161 mg/kg bw/d (Workers)

· **PNECs**	
78-93-3 butanone	
PNEC Acqua dolce/water/woda sğdka/eau/agua/水	55.8 mg/L (_)
PNEC Suolo/earth/suelo/ſtsuρO/地面	22.5 mg/kg (_)

· **Ingredients with biological limit values:**	
78-93-3 butanone (2.5-4.99%)	
BMGV	70 µmol/L Medium: urine Sampling time: post shift Parameter: butan-2-one

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**
Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Avoid contact with the eyes and skin.

· **Respiratory protection:**
In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

(Contd. on page 5)

(Contd. of page 4)

· **Protection of hands:**



Protective gloves

The glove material has to be impermeable and resistant to the product and in accordance with EN 374 and Directive 89/686/EEC.
Due to missing tests no recommendation to the glove material can be given for the product.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Material of gloves**
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

· **Penetration time of glove material**
The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Glasses (EN166) or other protective equipment

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**	
· **General Information**	
· **Appearance:**	
· **Form:**	Fluid
· **Colour:**	According to product specification
· **Odour:**	Characteristic
· **Odour threshold:**	Not determined.
· **pH-value:**	Not determined.
· **Change in condition**	
· **Melting point/freezing point:**	Undetermined.
· **Initial boiling point and boiling range:**	79 °C
· **Flash point:**	100 °C
· **Flammability (solid, gas):**	Not applicable.
· **Ignition temperature:**	514 °C
· **Decomposition temperature:**	Not determined.
· **Auto-ignition temperature:**	Product is not selfigniting.
· **SADT**	60°C . See chapter 10
· **Explosive properties:**	Product does not present an explosion hazard.
· **Explosion limits:**	
· **Lower:**	1.8 Vol %
· **Upper:**	11.5 Vol %

(Contd. on page 6)

ivm Chemicals
coatings & polymers technologies

Safety data sheet
as per regulation 1907/2006/EC (REACH) as amended and supplemented

Printing date 24.10.2019 Version number 132 Revision: 27.09.2019

Product code LOB810
Trade name: CATALYST FOR PE V

(Contd. of page 5)

· **Vapour pressure at 20 °C:**	105 hPa
· **Density at 20 °C:**	1.1 g/cmį
· **Relative density**	Not determined.
· **Vapour density**	Not determined.
· **Evaporation rate**	Not determined.
· **Solubility in / Miscibility with**	
· **water:**	Not miscible or difficult to mix.
· **Partition coefficient: n-octanol/water:**	Not determined.
· **Viscosity:**	
· **Dynamic:**	Not determined.
· **Kinematic at 20 °C:**	30 s (ISO 3 mm)
· **Oxidising properties :**	N.A.
· **Solvent content:**	
· **VOC and Total VOC (organic solvents + reactive solvents if any)**	3.00 %
· **Water:**	2.0 %
· **VOC (EC)**	33.0 g/l
· **Solids content:**	95.0 % (EU regulations)
· **9.2 Other information**	No further relevant information available.

SECTION 10: Stability and reactivity

· **10.1 Reactivity** Typical of the product as indicated in the data sheet
· **10.2 Chemical stability**
SADT - (Self accelerating decomposition temperature) is the lowest temperature at which it will trigger the self-accelerating decomposition of a substance contained in a typical packaging used to transport the product.
A dangerous self-accelerating decomposition reaction and, under certain circumstances, explosion or fire can be caused by thermal decomposition at the temperature indicated here or superior to it: 60 ° C. The contact with incompatible substances can cause decomposition at the SADT temperature or at temperatures lower than 60 ° C to it.
· **Thermal decomposition / conditions to be avoided:**
No decomposition if used and stored according to specifications.
· **10.3 Possibility of hazardous reactions** Vapours may form explosive mixtures with air
· **10.4 Conditions to avoid** No further relevant information available.
· **10.5 Incompatible materials:** No further relevant information available.
· **10.6 Hazardous decomposition products:**

In case of possible formation of combustion:
Carbon monoxide and carbon dioxide

SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**
· **Acute toxicity**
Harmful if swallowed or if inhaled.

(Contd. on page 7)

Safety data sheet
as per regulation 1907/2006/EC (REACH) as amended and supplemented

Printing date 24.10.2019 Version number 132 Revision: 27.09.2019

Product code LOB810
Trade name: CATALYST FOR PE V

(Contd. of page 6)

· LD/LC50 values relevant for classification:		
1338-23-4 2-Butanone, peroxide		
Oral	LD50	1,017 mg/kg (mouse)
Dermal	LD50	4,000 mg/kg (mouse)
78-93-3 butanone		
Oral	LD50	2,001 mg/kg (mouse)
Dermal	LD50	5,001 mg/kg (rabbit)
Inhalative	LC50/4 h	21 mg/l (mouse)

· **Primary irritant effect:**
· **Skin corrosion/irritation**
Causes severe skin burns and eye damage.
· **Serious eye damage/irritation**
Causes serious eye damage.
· **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.
· **CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)**
· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.
· **Carcinogenicity** Based on available data, the classification criteria are not met.
· **Reproductive toxicity** Based on available data, the classification criteria are not met.
· **STOT-single exposure** Based on available data, the classification criteria are not met.
· **STOT-repeated exposure** Based on available data, the classification criteria are not met.
· **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· **12.1 Toxicity**

· Aquatic toxicity:	
78-93-3 butanone	
EC50	2,029 mg/l (algae) (96 h)
	308 mg/l (daphnia) (48 h)
LC50 (96h)	2,993 mg/l (Fish)

· **12.2 Persistence and degradability** No further relevant information available.
· **12.3 Bioaccumulative potential** No further relevant information available.
· **12.4 Mobility in soil** No further relevant information available.
· **Additional ecological information:**
· **General notes:**
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
Must not reach sewage water or drainage ditch undiluted or unneutralised.
· **12.5 Results of PBT and vPvB assessment**
· **PBT:** Not applicable.
· **vPvB:** Not applicable.
· **12.6 Other adverse effects** No further relevant information available.

(Contd. on page 8)

ivm Chemicals
coatings & polymers technologies

Safety data sheet
as per regulation 1907/2006/EC (REACH) as amended and supplemented

Printing date 24.10.2019 Version number 132 Revision: 27.09.2019

Product code LOB810
Trade name: CATALYST FOR PE V

(Contd. of page 7)

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**
· **Recommendation**
Must not be disposed together with household garbage. Do not allow product to reach sewage system.
Hand over to hazardous waste disposers.
The code number of the product as is 080111

· **Uncleaned packaging:**
· **Recommendation:** Disposal must be made according to official regulations.

SECTION 14: Transport information

· **14.1 UN-Number**	
· **ADR, IMDG, IATA**	UN3105
· **14.2 UN proper shipping name**	
· **ADR, IMDG, IATA**	ORGANIC PEROXIDE TYPE D, LIQUID (Methyl ethyl ketone peroxide)
· **14.3 Transport hazard class(es)**	
· **ADR, IMDG, IATA**	



· **Class**	5.2 Organic peroxides.
· **Label**	5.2
· **14.4 Packing group**	
· **ADR, IMDG, IATA**	Not classified
· **14.5 Environmental hazards:**	
· **Marine pollutant:**	No
· **14.6 Special precautions for user**	Warning: Organic peroxides.
· **Danger code (Kemler):**	-
· **EMS Number:**	F-J,S-R
· **Segregation groups**	Peroxides
· **14.7 Transport in bulk according to Annex II of Marpol and the IBC Code**	Not applicable.
· **Transport/Additional information:**	
· **ADR**	
· **Limited quantities (LQ)**	125 ml
· **Excepted quantities (EQ)**	Code: E0 Not permitted as Excepted Quantity
· **Transport category**	2
· **Tunnel restriction code**	D
· **IMDG**	
· **Limited quantities (LQ)**	125 ml

(Contd. on page 9)

Safety data sheet
as per regulation 1907/2006/EC (REACH) as amended and supplemented

Product code LOB810
Trade name: CATALYST FOR PE V

(Contd. of page 8)

· **Excepted quantities (EQ)**	Code: E0 Not permitted as Excepted Quantity
· **UN "Model Regulation":**	UN 3105 ORGANIC PEROXIDE TYPE D, LIQUID (METHYL ETHYL KETONE PEROXIDE), 5.2

SECTION 15: Regulatory information

· **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
Directive n. : 80/1107/CEE, n. 82/605/CEE, n. 83/477/CEE, n. 86/188/CEE e n. 88/642/CEE, 89/391/CEE, 89/654/CEE, 89/655/CEE, 89/656/CEE, 90/269/CEE, 90/270/CEE, 90/394/CEE, 90/679/CEE, 93/88/CEE, 95/63/CE, 97/42/CE, 98/24/CE, 99/38/CE, 99/92/CE, 2001/45/CE, 2002/44,2003/10/CE, 2003/18/CE , 2004/40/CE,2006/25
DIRECTIVE 2012/18/EU
P6b SELF-REACTIVE SUBSTANCES AND MIXTURES and ORGANIC PEROXIDES - Lower-tier requirements : 50 t
- Upper-tier requirements : 200 t
· **Various regulations** For uses not regulated by D. 2004/42/EC-For professional use only
· **Qualifying quantity (tonnes) for the application of lower-tier requirements** 50 t
· **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
· **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

· **National regulations:**
The product is subject to be labeled according with the prevailing version of the regulations on hazardous substances.
· **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· **Relevant phrases**
H225 Highly flammable liquid and vapour.
H242 Heating may cause a fire.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H332 Harmful if inhaled.
H336 May cause drowsiness or dizziness.

· **Department issuing SDS:** IVM Chemicals Srl
· **Contact:** Claudia Zanella
· **Abbreviations and acronyms:**
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
IMDG: International Maritime Code for Dangerous Goods
IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)

(Contd. on page 10)

Safety data sheet
as per regulation 1907/2006/EC (REACH) as amended and supplemented

Printing date 24.10.2019 *Version number 132* *Revision: 27.09.2019*

Product code LOB810
Trade name: CATALYST FOR PE V

(Contd. of page 9)

VOC: Volatile Organic Compounds (USA, EU)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Flam. Liq. 2: Flammable liquids ï Category 2
Org. Perox. D: Organic peroxides ï Type C/D
Acute Tox. 4: Acute toxicity ï Category 4
Skin Corr. 1B: Skin corrosion/irritation ï Category 1B
Eye Dam. 1: Serious eye damage/eye irritation ï Category 1
Eye Irrit. 2: Serious eye damage/eye irritation ï Category 2
STOT SE 3: Specific target organ toxicity (single exposure) ï Category 3

· ***Sources***
REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL and following amendments
Agency ECHA web site
INRS Fiche Toxicologique

· **** Data compared to the previous version altered.***