



IICP

Version: 4

Language: EN

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)

Revision date: 08/01/2015

SECTION 1: Identification of the substance/mixture and of the Company/Undertaking

1.1. Product identifier

POLYCHLOR

40/42/45/45 PU/50/52/56/58/60/63% Chlorine Content

Other names: Medium-Chain chlorinated paraffins/alkanes, C14-C17, chloro C14-C17 chlorinated paraffin (chlorination: 40-60%)
CAS-number: 85535-85-9
EC-number: 287-477-0
REACH registration number: 01-2119519269-33-0011

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

Identified uses of the substance/mixture: lubricants and lubricant additives, anti-set off and adhesive agent, flame retardant and water proofing, plasticiser in polyvinyl chloride, in paints and rubbers, extreme pressure additives (metal cutting/working fluids), solvent in carbonless copy paper and fat liquors used in leather processing, softeners, for details please refer to the exposure scenarios in the appendix.

Not recommended uses of the substance/mixture: plasticiser in products for food contact applications

1.3. Details of the supplier of the Safety Data Sheet

Manufacturer

International Industrial Chemical Park SAE (IICP)
P. O. Box No. 103,
New Borg al Arab City,
Zone 4, Block 26,
Alexandria, Egypt

Telephone: +2 03 462 8105

Fax: +2 03 462 8106

E-mail: Marketing@iicpglobal.com

Supplier (Only Representative)

BiPRO GmbH
Grauertstr. 12
81545 München, Germany

Telephone: +49 89 189 790 50

Fax: +49 89 189 790 52

E-mail (competent person): mail@bipro.de

1.4. Emergency telephone number

GIZ Nord, Göttingen, Germany

Telephone: +49 551 19 240

SECTION 2: Hazards identification 2.1. Classification of the substance or mixture

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

Repr. Lact.; H362
Aquatic Acute 1; H400
Aquatic chronic 1;
H410 EUH066

2.1.2. Classification according to Directive 67/548/EEC and 1999/45/EC

R64
R66
N; R50/53

2.1.3. Additional information For full text of R-phrases and Hazard- and EU Hazardstatements:
see section 16

2.2. Label elements

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

Hazard pictograms:



Signal word: Warning

H phrases: H362 May cause harm to breast-fed children.
H410 Very toxic to aquatic life with long lasting effects.
EUH066 Repeated exposure may cause skin dryness or cracking.

P phrases: **Prevention**

P201 Obtain special instructions before use.
P260 Do not breathe dust/fume/gas/mist/vapours/spray.
P263 Avoid contact during pregnancy/while nursing.
P264 Wash hands and face thoroughly after handling.
P270 Do not eat, drink or smoke when using this product. P273 Avoid release to the environment.

Response

P308+P313 IF exposed or concerned: Get medical advice/attention.
P391 Collect spillage.

Disposal

P501 Dispose of contents/container according to official state regulations.

2.3. Other hazards This substance does not meet the criteria for classification as PBT or vPvB.
Repeated exposure may cause skin dryness or cracking.

SECTION 3: Composition/information on ingredients 3.1. Substances

Substance name	EC No	CAS No	REACH registration No	Concentration (%)	Classification according to Regulation (EC) No. 1272/2008 (CLP):		Classification according to Directive 67/548/EEC and 1999/45/EC:
					Hazard Class and Category Code	Hazard statement Code	
Chloroalkanes (C14-17) / Chlorinated paraffins, C14-17	287-477-0	85535-85-9	01-2119519269-33-0011	100	Repr. Lact. Aquatic Acute 1 Aquatic chronic 1	H362 H400 H410	R64 R66 N; R50/53
EUH066							

For full text of R-phrases and Hazard- and EU Hazard-statements: see section 16

SECTION 4: First aid measures 4.1. Description of first aid measures

General information: In case of accident or if you feel unwell, seek medical advice immediately (show safety data sheet if possible). Seek medical attention if problems persist.

Following inhalation: Move victim out of danger zone and lay down. Provide fresh air. Put victim at rest, cover with a blanket and keep warm.

Following skin contact: After contact with skin, wash immediately with plenty of water and soap. Change contaminated clothing.

Following eye contact: In case of contact with eyes, rinse immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Consult an ophthalmologist.

Following ingestion: Rinse mouth thoroughly with water. Do not induce vomiting. If vomiting occurs, keep head lower than hips to help prevent aspiration. In case of unconsciousness place in unconscious position and seek medical advice.

Self-protection: First aid assistant: Pay attention to self-protection!

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

Symptoms: If skin irritation or rash occurs: Seek medical advice.

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

Emergency aid: First Aid, decontamination, treatment of symptoms. In case of accident or if you feel unwell, seek medical advice immediately (show safety data sheet if possible).

Treatment: Treat symptomatically.

SECTION 5: Fire fighting measures 5.1. Extinguishing media

Suitable: Atomized water. Water spray. Dry extinguishing powder. Carbon dioxide (CO₂). **Unsuitable:** High power water jet.

5.2. Special hazards arising from the substance or mixture

Product is: Non-flammable. Hazardous decomposition products can be released in case of fire, heating above 200°C for short periods or above 70°C prolonged periods: Hydrogen chloride (HCl). Carbon monoxide (CO). Carbon dioxide (CO₂). Pyrolysis products, toxic.

5.3. Advice for fire fighters

Special protective equipment for fire-fighters Wear a self-contained breathing apparatus and chemical resistant suit.

Additional information

Keep away from unprotected people. Keep upwind. In case of fire and/or explosion do not breathe fumes. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures 6.1. Personal precautions, protective equipment and emergency procedures

Wear personal protection equipment. See protective measures under point 7 and 8. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eye and clothing. General protection and hygiene measures: Do not eat, drink, smoke or sneeze at the workplace. Wash hands before breaks and at the end of work. After work, wash hands and face. Take off contaminated clothing and wash before reuse.

6.2. Environmental precautions

Dumping into the environment must be prevented. Do not empty into drains or the aquatic environment. Do not allow to enter into soil/subsoil. In case leakage into waters, ground or the drainage system, the appropriate authorities must be informed.

6.3. Methods and material for containment and cleaning up

High slip hazard because of leaking or spilled product. Take up leaks and spilled liquids in cabinets with mobile collection trays. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Eliminate leaks immediately. Collect in closed containers for disposal. Waste disposal according to official state regulations. Treat the assimilated material according to the section on waste disposal.

6.4. Reference to other sections See protective measures under section 7 and 8. Treat the assimilated

material according to the section on waste disposal (section 13).

SECTION 7: Handling and storage 7.1. Precautions for safe handling

Information for safe handling

Avoid contact with skin, eye and clothing. Do not breathe gas/fumes/vapour/spray. Wear personal protection equipment. Handle and open container with care. Always close containers tightly after the removal of product. General protection and hygiene measures: Do not eat, drink, smoke or sneeze at the

workplace. Wash hands before breaks and at the end of work. After work, wash hands and face. Change contaminated clothing.

Technical measures

Provide for sufficient ventilation and punctiform suction at critical points.
Provide sufficient washing facilities.

Precautions against fire and explosion Refer to section 5.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep only in the original container in a dry, cool, well-ventilated place. Keep away from direct sunlight.
Storage temperature: $\leq 40^{\circ}\text{C}$

Packaging materials

Keep/Store only in original container. Keep the packing dry and well sealed to prevent contamination and absorption of dampness. Suitable material for container: steel. stainless steel. rustproof steel.

Requirements for storerooms and containers

Keep container tightly closed and in a well-ventilated place. Keep locked up. The floor should be leak tight, jointless and not absorbent. Ensure adequate ventilation of the storage area. Store in a place accessible only to authorized persons.

Information about storing together in storage facility

Keep away from food, drink and animal feeding stuffs. Keep away from clothing as well as other incompatible materials. Protect from direct sunlight. Do not store together with: Oxidizing agents, strong.

Storage class: No information available

7.3. Specific end use(s)

Refer to section 1.2.

SECTION 8: Exposure controls / Personal protection 8.1. Control parameters

8.1.1. Limits for occupational exposure No occupational exposure limits have been identified/indicated. Source: GESTIS International Limit Values

8.1.2. DNEL and PNEC values

DNEL-values

DNEL	Oral	Inhalation	Dermal
Industry - Long Term - Local effects	-	-	-
Industry - Long Term - Systemic effects	-	3 1.6 mg/m	47.9 mg/kg bw/day
Industry - Short term - Local effects	-	-	-
Industry - Short term - Systemic effects	-	-	--
Consumer - Long Term - Local effects	-	-	-

Consumer - Long Term - Systemic effects	0.58 mg/kg bw/day	3 2 mg/m	28.75 mg/kg bw/day
Consumer - Short term - Local effects	-	-	-
Consumer - Short term - Systemic effects	-	-	--

PNEC-values

Environment	PNEC
Aquatic compartment (including sediment)	1 µg/l fresh water 0.2 µg/l marine water 80 mg/l micro-organisms (sewage treatment plant) 5 mg/kg wet Sediment (Fresh water) 1 mg/kg wet Sediment (Marine water)
Terrestrial compartment	10.5 mg/kg wet (Soil) 10 mg/kg (Food)
Atmospheric compartment	No data available

8.1.3. Control-Banding**Control-Banding**

No information available

8.2. Exposure controls**Occupational exposure controls**

General protection and hygiene measures: Do not eat, drink, smoke or sneeze at the workplace. Wash hands before breaks and at the end of work. After work, wash hands and face.

Chemical handling

Avoid contact with skin, eye and clothing. Do not breathe gas/fumes/vapour/spray. Handle and open container with care. Always close containers tightly after the removal of product.

Personal protection equipment Wear personal protection equipment. Change contaminated clothing. Wash prior to reuse.

Respiratory protection

If technical suction or ventilation measures are not possible or are insufficient, protective breathing apparatus must be worn. Suitable respiratory protective equipment: gas filtering equipment (EN 141) or combination filter device (DIN EN 141). Filter type A (organic vapours with boiling point > 65°C)

Hand protection

When handling chemical substances, chemical protective gloves must be worn with CE label including a four digit code. Type of chemical protective gloves to choose depends on the concentration and quantity of dangerous substances as well as on work place specifications.

Suitable gloves type: NBR (Nitrile rubber). Permeation time: ≥ 8 h
In the cases of special applications, it is recommended to check the chemical resistance with the manufacturer of the gloves.

Eye protection

Suitable eye protection: Tightly sealed safety glasses.

Skin protection Suitable protection of the body:

Lab apron. Boots.

Environmental exposure controls Dumping into the environment must be prevented.

SECTION 9: Physical and chemical properties 9.1. Information on the basic physical and chemical properties

Appearance	State of matter:	liquid
Colour:		no data available
Odour:		neutral to slightly acidic
Odour threshold:		no data available

Safety relevant basis data

Parameter	Value	Unit	Remark
Density:	1.10 – 1.45	g/ml	at 25°C
Package density:			not relevant
pH:			no data available
Melting point / range:	-50 - 25	°C	
Boiling temperature / range:	> 200	°C	decomposes below boiling point
Flash point:		°C	at 1013hPa
Flammability:			non flammable
Lower flammability limit:			no data available
Upper flammability limit:			no data available
Explosion hazard:			no data available
Lower explosion limit:			no data available
Upper explosion limit:			no data available
Ignition temperature:			no data available
Decomposition temperature:	< 200	°C	
Oxidizing characteristics:			no data available
Vapour pressure:	1.3 x 10 ⁻⁴ - 2.7 x 10 ⁻⁴	Pa	
Relative vapour density:			no data available
Speed of vaporization/evaporation			no data available
Solubility in water:	0.027	mg/l	at 20°C
Solubility in other solvents:			soluble in many organic solvents as aromatic and aliphatic hydrocarbons, ketones, esters, slightly soluble in alcohol, miscible in benzene, chloroform, ether, carbon tetrachloride, soluble in vegetable and animal oils
log P O/W (n-octanol / water):	7		at 20°C
Viscosity:	90 - 12,000	mm ² /s	at 20°C
	25 - 1,200	mm ² /s	at 40°C

9.2. Other information Solubility

in other solvents:		insoluble in glycerine
Pour point:	-40 – 27	°C

SECTION 10: Stability and reactivity

10.1. Reactivity Non reactive under standard conditions.

10.2. Chemical stability Stable at ambient temperatures.

10.3. Possibility of hazardous reactions

Violent reaction with: Alkali metals. alkaline earth metals. Reaction with: zinc, iron, alumina (at high temperatures leading to decomposition) Chlorinated paraffins tend to soften or swell most rubbers.

10.4. Conditions to avoid

Protect from heat and direct sunlight. Keep away from hot surfaces.

10.5. Incompatible materials Keep away from: Oxidizing agents, strong. Rubber material.

10.6. Hazardous decomposition products

Hazardous decomposition products can be released in case of fire, heating above 200°C for short periods or above 70°C prolonged periods: Hydrogen chloride (HCl). Carbon monoxide (CO). Carbon dioxide (CO₂). Pyrolysis products, toxic.

SECTION 11: Toxicological information 11.1. Information on toxicological effects

Low oral toxicity. Unlikely to be hazardous by inhalation. Repeated exposure may cause skin dryness or cracking. Anticipated to have low dermal toxicity. This health hazard assessment is based on information available on the product as well as similar products.

Acute toxicity (C14-17 chlorinated paraffins)

Acute toxicity, oral Rat. LD50: > 2 g/kg bw

Acute toxicity (C10-13 chlorinated paraffins)

Acute toxicity, dermal Rat. LD50: > 2 g/kg bw

Specific symptoms in laboratory animals

No deaths were seen in acute inhalation studies in rats exposed to air containing a C12 chlorinated paraffin (59% chlorination) at 3.3 mg/l or a 50% chlorinated short chain chlorinated paraffin (unspecified chain length) at 48 mg/l for 1 hr.

two studies conducted according to OECD

Irritant effect on the skin Slight skin irritation reported in

11.2. Irritation and etching

Guideline 404 using undiluted C14-17 chlorinated paraffins (40 and 52% chlorination - containing 1%

Slight eye irritation reported in two studies conducted

Irritant effect on the eye according to OECD Guideline 405 using undiluted C14-17 epoxy stabiliser). chlorinated paraffins (40 and 52% chlorination - containing 1%

epoxy stabiliser). **Irritant**
effect on the respiratory tract Not irritating

Etching

No data available.

11.3. Sensitization

It is not a skin sensitiser in animal tests.

11.4. Repeated dose toxicity

Repeated exposure to high levels may produce liver and kidney damage. Chronic ingestion studies in animals have shown that repeated doses of a representative chlorinated paraffin (C14-17, 52%) gave no adverse effects at doses 23 mg/kg/day (90 day study). Slight effects on the liver were seen at doses >360 mg/kg/day. These effects occur after the administration of high oral doses of C14-C17 chlorinated paraffins to the female rat, a situation that would not arise under any reasonably foreseeable circumstances of human exposure.

11.5. CMR effects

Carcinogenicity Not tested for carcinogenicity. Chlorinated paraffins are not genotoxic. Their lack of genotoxic activity together with the results of other studies leads to the conclusion that chlorinated paraffins are unlikely to present a carcinogenic hazard to man under normal conditions of handling and use.

Mutagenicity Not mutagenic in in vitro or in-vivo assays.

Reproductive toxicity No reported effects on fertility at doses up to 400 mg/kg/day. No effects in conventional development toxicity studies with doses up to 5000 mg/kg/day (rat) and 100 mg/kg/day (rabbit). Mortality due to internal haemorrhaging has been seen in new born rats fed on high doses of similar chlorinated paraffin. However, classified as Repr. Lact. H362: May cause harm to breast-fed children.

11.6. General remarks

Not an aspiration hazard.

SECTION 12: Ecological information

Representative C14-17 chlorinated paraffin has been shown to be toxic to *daphnia* in laboratory studies. It showed a low level of toxicity to another aquatic invertebrate species (*gammarus*) and to fish and algae.

12.1. Toxicity

Acute Daphnia toxicity (<i>Daphnia magna</i>)	EC50: 0.0059 mg/l (48h)
(<i>Gammarus pulex</i>)	LC50: ≥ 1.0 mg/l (96h)
Acute fish toxicity (<i>Alburnus alburnus</i>)	LC50: ≥ 5000 mg/l (96h)
Algae toxicity (<i>Selenastrum capricornutum</i>)	EC50: ≥ 3.2 mg/l (96h) (biomass)

M-Factor = 100

12.2. Persistence and degradability

Concentrations in the atmosphere are likely to be very small due to low volatility. Estimated atmospheric half-life is 1 - 2 days.

Biodegradation in water: 45.6% chlorinated C14-17 paraffin easily biodegradable (and not persistent); 63.2% C14-17 chlorinated paraffin not easily biodegradable.

Biodegradation in soil: Studies conducted on C14.5 and C15.4 (average C chain length) with 43.5% & 50% chlorination showed 57% and 51% degradation of the test substance after 36 hours.

Biodegradation in water and sediments: Simulation tests conducted on two C16 chlorinated paraffins (containing 35% Cl₂ and 58% Cl₂) gave a half-life (DT50) of 12 days and 58 days in freshwater sediment, respectively.

12.3. Bioaccumulative potential The product has potential for limited bioaccumulation. (BCF < 2000 L/kg, BMF <1, Koc value 588,844 l/kg)

40/42/45/45PU/50/52/56/58/60/63% Chlorine Content

12.4. Mobility in soil The product is predicted to have low mobility in soil.

12.5. Results of PBT and vPvB assessment

This substance does not meet the criteria for classification as PBT or vPvB.

12.6. Other adverse effects None known.

SECTION 13: Disposal considerations 13.1. Waste treatment methods

Appropriate disposal/product

This material and/or its container must be disposed of as hazardous waste. Do not discharge into drains or the environment; dispose to an authorised waste collection point. Disposal should be in accordance with local, state or national legislation.

Appropriate disposal/packaging

Handle contaminated packaging in the same way as the substance itself. Waste disposal according to official state regulations.

SECTION 14: Transport information 14.1. UN Number

Not regulated

14.2. UN proper shipping name

ADR/RID

Not regulated

IMDG-Code / ICAO-TI / IATA-DGR

Not regulated

14.3. Transport hazard class(es)

Not regulated

14.4. Packing group

Not regulated

14.5. Environmental hazards

Hazard code(s) ADR/RID: no Marine pollutant: no

14.6. Special precautions for users

Refer to sections 5-8.

40/42/45/45PU/50/52/56/58/60/63% Chlorine Content

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Pollution Category: X **Ship type:** 1

Product name: Chlorinated paraffins (C14-C17) **Special provisions:** -

14.8. Further limitations and legal requirements

Tunnel restriction code: 3 (E)

SECTION 15: Regulatory information 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU-Regulations

Regulation (EC) No 1907/2006 (REACH)

Restrictions under Annex XVII of Regulation (EC) No 1907/2006 (REACH): relevant, Point

3 Regulation (EC) No 1272/2008 (CLP)

Directive 67/548/EEC and 1999/45/EC

National regulations

Moreover, national legislation has to be observed!

Information on working limitations

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers. Youths are only allowed to handle this product according to the regulation 94/33/EC, and as long as all effects of dangerous substances are prevented. Observe regulation 98/24/EC for employee health protection against the threat of chemical substances in the workplace.

Major Accidents Ordinance (DE)

Relevant, see Annex I – No: 9a (Threshold for operating range to §1 sec. 1

- Record 1: 100000 kg
- Record 2: 200000 kg)

Storage class according to TRGS 510 (DE)

No data available.

Water Hazard Class according to VwVwS (DE)

strong water pollutant (WGK 3)

Technical Instructions on Air Quality Control (TA-Luft) (DE)

Relevant, see Chapter 5.2.5 TA-Luft

15.2. Chemical safety assessment

For this preparation a chemical safety assessment has been carried out: yes

40/42/45/45PU/50/52/56/58/60/63% Chlorine Content

SECTION 16: Other information 16.1. Wording of the H and R-phrases under section 2 and 3

Regulation (EC) No 1272/2008

H362	May cause harm to breast-fed children.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
EUH066	Repeated exposure may cause skin dryness or cracking.

Directive 67/548/EEC

R64	May cause harm to breast-fed babies.
R66	Repeated exposure may cause skin dryness or cracking.
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

16.2. Training instructions The product should only be handled by persons over the age of 18, who were informed sufficiently about the dangerous nature of the product and about the necessary safety precautions.

16.3. Further remarks

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

16.4. Documentation of changes

All sections: Adjustment of layout according to Regulation (EC) No 1907/2006 (REACH)

Section 1: Addition REACH registration number, adjustment of identified uses according to the exposure scenario

Section 2: Addition of labeling elements

Section 3: Addition REACH registration number

Section 8: Correction / addition of PNEC values Section 9: Addition of physical and chemical properties

Section 11: Addition / adjustment of information on respiratory irritation, mutagenicity

Section 12: Addition / adjustment of toxicological data, information of biodegradation and Koc value

Section 15: Adjustment Regulations

Section 17: Addition of Exposure Scenario

16.5. Data sources

Data arise from reference works and literature.

16.6. Key and definition None

SECTION 17: Appendix

17.1. Exposure scenario See below.
