

Hydrosol P180/280 HC

Version number: GHS 1.0

Revision: 25.02.2016

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Trade name

Hydrosol P180/280 HC

Registration number (REACH)

Name of substance.

Identifier.

Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, aromatics (2-30 %).

CAS No
64742-81-0.EC No
920-360-0.

Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, aromatics (2-25%).

REACH Reg. No
01-2119448343-41-0006.CAS No
64742-81-0.EC No
925-653-7.REACH Reg. No
01-2119458869-15-0001.

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

Relevant identified uses

Use as binders and release agents
Distribution of substance
manufacture of substances
Use in laboratories
Formulation & (re)packing of substances and mixtures
Use in Cleaning Agents
Use as a fuel
Water treatment chemicals
Road and construction applications
Use in Agrochemicals
Metal working fluids / rolling oils

1.3 Details of the supplier of the safety data sheet

DHC Solvent Chemie GmbH
Timmerhellstraße 28
D-45478 Mülheim an der Ruhr
GermanyTelephone: +49 (208) 9940-0
Telefax: +49 (208) 9940-150

Competent person responsible for the safety data sheet

Yvonne Knappe

e-mail (competent person)

productsafety@dhc-solvent.de

1.4 Emergency telephone number

Emergency information service

DHC Solvent Chemie GmbH
+49 (208) 9940-112This number is only for medical emergencies.
Giftnotrufzentrale Berlin
+49 (0)30 19 240.

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SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Hazard class	Category	Hazard class and category	Hazard statement
aspiration hazard	Cat. 1	(Asp. Tox. 1)	H304
hazardous to the aquatic environment - chronic hazard	Cat. 3	(Aquatic Chronic 3)	H412

Remarks

For full text of H-phrases: see SECTION 16.

Supplemental hazard information

Supplemental hazard information.

EUH066 Repeated exposure may cause skin dryness or cracking.

The most important adverse physicochemical, human health and environmental effects

May be fatal if swallowed and enters airways.

2.2 Label elements

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

Signal word

Danger

Pictograms

GHS08



Hazard statements

H304 May be fatal if swallowed and enters airways.
H412 Harmful to aquatic life with long lasting effects.

Precautionary statements

Precautionary statements - prevention

P273 Avoid release to the environment.

Precautionary statements - response

P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician.
P331 Do NOT induce vomiting.

Precautionary statements - storage

P405 Store locked up.

Precautionary statements - disposal

P501 Dispose of contents/container to industrial combustion plant.

Additional labelling requirements

EUH066 Repeated exposure may cause skin dryness or cracking.

Hazardous ingredients for labelling:

Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, aromatics (2-30 %), Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)

2.3 Other hazards

According to the results of its assessment, this substance is not a PBT or a vPvB.

This material is combustible, but will not ignite readily. Vapour heavier than air, may form an explosive mixture in air at temperatures above the flashpoint. Slip hazard by spilled and leaked out product. Flowing product can create electrostatic charge, resulting sparks may ignite or cause an explosion.

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SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance	Identifier	wt%	Classification acc. to 1272/2008/EC
Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, aromatics (2-30 %)	CAS No 64742-81-0 EC No 920-360-0	≤ 50	Asp. Tox. 1 / H304
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	CAS No 64742-81-0 EC No 925-653-7	≥ 50	Asp. Tox. 1 / H304 Aquatic Chronic 3 / H412

For full text of abbreviations: see SECTION 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

Following eye contact

Irrigate copiously with clean, fresh water, holding the eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. In all cases of doubt, or when symptoms persist, seek medical advice.

Following ingestion

Do NOT induce vomiting. Rinse mouth with water (only if the person is conscious).

4.2 Most important symptoms and effects, both acute and delayed

Choking and suffocation risks. Deficits in perception and coordination, reaction time, or sleepiness.

4.3 Indication of any immediate medical attention and special treatment needed

none

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SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

carbon dioxide (CO₂), BC-powder, foam, alcohol resistant foam, water mist

Unsuitable extinguishing media

water jet

5.2 Special hazards arising from the substance or mixture

May produce toxic fumes of carbon monoxide if burning.

Hazardous combustion products

carbon monoxide (CO), carbon dioxide (CO₂)

5.3 Advice for firefighters

Wear breathing apparatus if exposed to vapours/dust/spray/gases. Co-ordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance. Keep containers cool with water spray.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety. Avoid inhaling sprayed product. Wearing of 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. Remove/take off immediately all contaminated clothing and wash it before reuse.

For emergency responders

Wear breathing apparatus if exposed to vapours/dust/spray/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose it.

6.3 Methods and material for containment and cleaning up

Advices on how to contain a spill

Covering of drains.

Advices on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage (sawdust, kieselgur (diatomite), sand, universal binder).

Appropriate containment techniques

Use of adsorbent materials. - covering of drains

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

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SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Recommendations

- **Measures to prevent fire as well as aerosol and dust generation**

Use only in well-ventilated areas. Use local and general ventilation.

Advice on general occupational hygiene

Wash hands after use. Do not to eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Managing of associated risks

Incompatible substances or mixtures

Observe hints for combined storage.

Consideration of other advice

- **Packaging compatibilities**

Suitable materials and coatings for container/equipment: Carbon Steel, Stainless Steel, Polyester, Polytetrafluoroethylene (PTFE), Polyvinyl Alcohol (PVA)

Unsuitable Materials and Coatings for container/equipment: Butyl Rubber, Natural Rubber, Ethylene-propylene-diene monomer (EPDM), Polystyrene, Polyethylene, Polyacrylonitrile.

7.3 Specific end use(s)

See attached exposure scenarios

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

National limit values

Occupational exposure limit values (Workplace Exposure Limits)

Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m ³]	STEL [ppm]	STEL [mg/m ³]	Source
DE	Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)		AGW		250		500	RCP method according to TRGS 900
DE	Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, aromatics (2-30 %)		AGW		5		10	RCP method according to TRGS 900
DE	Hydrosol P180/280 HC		AGW		250		500	
DE	hydrocarbon mixture (RCP method)		AGW		75		150	TRGS 900
DE	hydrocarbon mixtures, C9-C15 aliphatic	64742-81-0	AGW		600		1,200	TRGS 900
DE	hydrocarbon mixtures, C9-C15 aromatic	64742-81-0	AGW		100		200	TRGS 900
GB	aromatics	64742-81-0	WEL		500			EH40/2005

Notation

STEL Short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period unless otherwise specified.

TWA Time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average.

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8.2 Exposure controls

Appropriate engineering controls

Technical measures and the appliance of appropriate working methods take priority over the use of personal protective equipment.

Safety and necessary control measures vary according to exposure conditions. Appropriate measures are:

Open windows, door, to allow sufficient ventilation. If this is not possible employ a fan to increase air exchange (see attached exposure scenarios).

Individual protection measures (personal protective equipment)

Eye/face protection

Use safety goggle with side protection.

Skin protection

• hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374.

Short-term contact with the skin: Disposable gloves

Long-term contact with the skin: Gloves with long cuffs

Check leak-tightness/impermeability prior to use.

• type of material

NBR: acrylonitrile-butadiene rubber, FKM: fluoro-elastomer

• material thickness

0,40 mm.

• breakthrough times of the glove material

>480 minutes (permeation: level 6)

• other protection measures

Take recovery periods for skin regeneration. Preventive skin protection (barrier creams/ointments) is recommended. Wash hands thoroughly after handling.

Body protection:

Suitable protective clothing: Flame resistant clothing

Suitable safety shoes: Anti static safety shoes according to EN 345 S3

Respiratory protection

For activities in enclosed areas at elevated temperatures of the substance, local extraction or explosion protected ventilation equipment is recommended. In case this is not sufficient for the intended use, then apply a suitable respiratory protection according to EN 140 type A or better (see exposure scenarios).

Environmental exposure controls

Do not empty into drains.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance

Physical state	liquid
Colour	colourless - light yellow
Odour	characteristic

Other physical and chemical parameters

pH (value)	not determined
Melting point/freezing point	<-30 °C (ASTM D 5950)
Initial boiling point and boiling range	178 - 285 °C (ASTM D 86)
Flash point	>65 °C (ASTM D 93)

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Explosive limits	
• lower explosion limit (LEL)	0.6 vol%
• upper explosion limit (UEL)	7 vol%
Vapour pressure	0.02 kPa at 20 °C
Density	0.8 - 0.83 g/cm ³
Solubility(ies)	not determined
Partition coefficient	
n-octanol/water (log KOW)	This information is not available.
Auto-ignition temperature	>200 °C
Viscosity	
• kinematic viscosity	1.4 - 4 mm ² /s (ASTM D7042)
Explosive properties	
in use, may form flammable/explosive vapour-air mixture	
Oxidising properties	none
9.2 Other information	
Solid content	0 %

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

This material is not reactive under normal ambient conditions.

10.2 Chemical stability

The material is stable under normal ambient and anticipated storage and handling conditions of temperature and pressure (see below "Conditions to avoid").

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Hints to prevent fire or explosion

Use explosion-proof electrical/ventilating/lighting equipment. Take precautionary measures against static discharge.

10.5 Incompatible materials

oxidisers

10.6 Hazardous decomposition products

No known hazardous decomposition products.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification according to GHS (1272/2008/EC, CLP)

This mixture does not meet the criteria for classification in accordance with Regulation No 1272/2008/EC.

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Acute toxicity

Shall not be classified as acutely toxic.

Skin corrosion/irritation

Shall not be classified as corrosive/irritant to skin.

Serious eye damage/eye irritation

Shall not be classified as seriously damaging to the eye or eye irritant.

Respiratory or skin sensitisation

Shall not be classified as a respiratory or skin sensitiser.

Summary of evaluation of the CMR properties

Shall not be classified as germ cell mutagenic, carcinogenic nor as a reproductive toxicant.

Specific target organ toxicity (STOT)

Shall not be classified as a specific target organ toxicant.

Aspiration hazard

May be fatal if swallowed and enters airways.

Other information

Repeated exposure may cause skin dryness or cracking.

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Aquatic toxicity (acute)

Aquatic toxicity (acute) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, aromatics (2-30 %)	64742-81-0	EL50	1,000 mg/l	algae	72 hours
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	64742-81-0	LL50	10 mg/l	rainbow trout (Oncorhynchus mykiss)	48 hours
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	64742-81-0	EL50	10 mg/l	daphnia magna	48 hours
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	64742-81-0	EL50	4.6 mg/l	algae	72 hours

Aquatic toxicity (chronic)

May cause long-term adverse effects in the aquatic environment.

Aquatic toxicity (chronic) of components of the mixture

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, aromatics (2-30 %)	64742-81-0	LL50	>5,000 mg/l	zebra fish	21 d
Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, aromatics (2-30 %)	64742-81-0	EL50	1,400 mg/l	daphnia magna	21 d

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Degradability of components of the mixture

Name of substance	CAS No	Process	Degradation rate	Time
Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, aromatics (2-30 %)	64742-81-0	oxygen depletion	15.4 %	4 d

12.3 Bioaccumulative potential

Data are not available.

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB.

12.6 Other adverse effects

Data are not available.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Sewage disposal-relevant information

Do not empty into drains.

Waste treatment of containers/packagings

Empty containers may contain residue and can be dangerous. Do not attempt to refill or clean containers without proper instructions. Empty drums should be completely drained and safely stored until appropriately reconditioned or disposed. Empty containers should be taken for recycling, recovery, or disposal through suitably qualified or licensed contractor and in accordance with governmental regulations. DO NOT PRESSURISE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION. THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.

List of wastes

Proposed waste code(s) for the used product:

07 01 04x Other organic solvents, washing liquids and mother liquors

Remarks

Please consider the relevant national or regional provisions. Waste shall be separated into the categories that can be handled separately by the local or national waste management facilities.

SECTION 14: TRANSPORT INFORMATION

14.1 UN number

9003

14.2 UN proper shipping name

SUBSTANCES WITH A FLASH-POINT ABOVE 60 °C BUT NOT MORE THAN 100 °C

14.3 Transport hazard class(es)

Class

9 (miscellaneous dangerous substances and articles)

14.4 Packing group

not assigned to a packing group

14.5 Environmental hazards

14.6 Special precautions for user

Provisions for dangerous goods (ADR) should be complied within the premises.

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14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

- **Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN)**

Not subject to ADR. Not subject to RID.

Binnenschifftransport (ADNR/ADN):

UN number

9003

Proper shipping name

SUBSTANCES WITH A FLASH-POINT ABOVE 60 °C BUT NOT MORE THAN 100 °C

Particulars in the transport document

Carriage in accordance with section

Class

9

- **International Maritime Dangerous Goods Code (IMDG)**

Not subject to IMDG.

- **International Civil Aviation Organization (ICAO-IATA/DGR)**

Not subject to ICAO-IATA.

SECTION 15: REGULATORY INFORMATION

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

Relevant provisions of the European Union (EU)

- **Limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products (2004/42/EC, Deco-Paint Directive)**

VOC content 100 %

- **Directive on industrial emissions (VOCs, 2010/75/EU)**

VOC content 100 %

15.2 Chemical Safety Assessment

For the following substances of this mixture a chemical safety assessment has been carried out.

Name of substance	EC No	REACH Reg. No
Hydrocarbons, C14-C18, n-alkanes, isoalkanes, cyclics, aromatics (2-30 %)	920-360-0	01-2119448343-41-0006
Hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	925-653-7	01-2119458869-15-0001

SECTION 16: OTHER INFORMATION

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
ADN	Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures (European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways)
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
AGW	workplace exposure limit
Aquatic Chronic	hazardous to the aquatic environment - chronic hazard
Asp. Tox.	aspiration hazard
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
CLP	Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures
CMR	Carcinogenic, Mutagenic or toxic for Reproduction
EC No	The EC Inventory (EINECS, ELINCS and the NLP-list) is the source for the seven-digit EC number, an identifier of substances commercially available within the EU (European Union)
EH40/2005	EH40/2005 Workplace exposure limits (http://www.nationalarchives.gov.uk/doc/open-government-licence/)

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Abbr.	Descriptions of used abbreviations
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
PBT	Persistent, Bioaccumulative and Toxic
ppm	parts per million
RCP	reciprocal calculation procedure
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals
RID	Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International carriage of Dangerous goods by Rail)
STEL	short-term exposure limit
TRGS 900	Arbeitsplatzgrenzwerte (TRGS 900)
TWA	time-weighted average
VOC	Volatile Organic Compounds
vPvB	very Persistent and very Bioaccumulative
WEL	workplace exposure limit

Key literature references and sources for data

- Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU
- Regulation (EC) No. 1272/2008 (CLP, EU GHS)
- See attached exposure scenarios

http://www.dhc-solvent.de/dhc_sdbreach.html

http://www.dhc-solvent.de/en/dhc_sdbreach.html

Transport of dangerous goods by road, rail and inland waterway (ADR/RID/ADN).
International Maritime Dangerous Goods Code (IMDG).
International Air Transport Association (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.
Health hazards/environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in chapter 2 and 3)

Code	Text
H304	may be fatal if swallowed and enters airways
H412	harmful to aquatic life with long lasting effects