

Hydrocarbons, C13-C16, isoalkanes, cyclics, <2% aromatics

Version number: GHS 1.1

Revision: 18.03.2016

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

1.1 Product identifier

Identification of the substance	Hydrocarbons, C13-C16, isoalkanes, cyclics, <2% aromatics
Registration number (REACH)	01-2119458871-30-0002
EC number	918-973-3
Index No	-
CAS number	64742-47-8
Additional relevant and available information	Hydrosol P230 EA Verusol 235/275 EA Verusol 240/260 EA Verusol 240/270 EA

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

Relevant identified uses	manufacture of substances Distribution of substance Formulation & (re)packing of substances and mixtures Use in Cleaning Agents Uses in Coatings Use in Oil and Gas field drilling and production operations Lubricants Metal working fluids / rolling oils Use as binders and release agents Use as a fuel Functional Fluids Road and construction applications Use in laboratories Water treatment chemicals Other Consumer Uses
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1.3 Details of the supplier of the safety data sheet

DHC Solvent Chemie GmbH
Timmerhellstraße 28
D-45478 Mülheim an der Ruhr
Germany

Telephone: +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) 9940-112

This 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

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.

Precautionary statements

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.

2.3 Other hazards

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

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

Name of substance	Hydrocarbons, C13-C16, isoalkanes, cyclics, <2% aromatics
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CAS number	64742-47-8
Index No	-
Purity	100 %

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

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.

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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.

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.

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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)

No information available.

Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m ³]	STEL [ppm]	STEL [mg/m ³]	Source
DE	Distillates (petroleum), hydro-treated light	64742-47-8	MAK		5		20	DFG
DE	Distillates (petroleum), hydro-treated light	64742-47-8	MAK	50	350	100	700	DFG
DE	Hydrocarbons, C13-C16, isoalkanes, cyclics, <2% aromatics	64742-47-8	AGW		600		1,200	RCP method according to TRGS 900

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.

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)

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• 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
Odour	characteristic

Other physical and chemical parameters

pH (value)	not determined
Melting point/freezing point	<-20 °C (ASTM D 5950)
Initial boiling point and boiling range	210 - 290 °C (ASTM D 86)
Flash point	>93 °C
Explosive limits	
• lower explosion limit (LEL)	0.6 vol%
• upper explosion limit (UEL)	7 vol%
Vapour pressure	0.003 kPa at 20 °C
Density	0.75 - 0.86 g/cm ³ at 15 °C
Solubility(ies)	not determined
Partition coefficient	
n-octanol/water (log KOW)	This information is not available.
Auto-ignition temperature	not determined
Viscosity	
• kinematic viscosity	2.3 - 9 mm ² /s at 20 °C (ASTM D7042)
Explosive properties	
in use, may form flammable/explosive vapour-air mixture	
Oxidising properties	none

9.2 Other information

Surface tension	25 - 28 mN/m (25 °C) (Wilhelmy Plate)
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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

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

Acute toxicity

Shall not be classified as acutely toxic.

Exposure route	Endpoint	Value	Species
oral	LD50	5,000 mg/kg	rat
inhalation: dust/mist	LC50	5,000 mg/m ³ /4h	rat
dermal	LD50	2,000 mg/kg	rabbit

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.

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SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

Shall not be classified as hazardous to the aquatic environment.

Aquatic toxicity (acute)

Endpoint	Value	Species	Exposure time
LL50	>1,000 mg/l	rainbow trout	96 hours
EL50	>1,000 mg/l	daphnia magna	48 hours

Aquatic toxicity (chronic)

Endpoint	Value	Species	Exposure time
NOELR	>1,000 mg/l	rainbow trout (Oncorhynchus mykiss)	28 d
NOELR	>1,000 mg/l	daphnia magna	21 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 re-conditioned 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.

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SECTION 14: TRANSPORT INFORMATION

- 14.1** UN number (not subject to transport regulations)
- 14.2** UN proper shipping name **not relevant**
- 14.3** Transport hazard class(es)
Class -
- 14.4** Packing group not relevant
- 14.5** Environmental hazards
- 14.6** Special precautions for user
There is no additional information.
- 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.

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 %

15.2 **Chemical Safety Assessment**

For this substance a chemical safety assessment has been carried out. According to article 14 of the REACH regulation a chemical safety assessment has been performed. This substance does not meet the criteria for human health or environmental classification, nor does it meet PBT/vPvB criteria. Therefore a use related quantitative risk assessment is not required.

The risk refers to the aspiration hazard (R65/H304). It can be controlled by implementing risk management measures tailored to this specific risk:

worker:

- do not ingest
- keep industrial hygiene
- avoid contaminated working Equipment consumer:
- observe safety instructions with lamp oils and barbeque lighter
- sales of opaque and black container with less than 1 l capacity
- labelling with specific safety statements

In case of repeated skin exposure dryness or cracking of the skin may result (R66/EUH066). Wearing suitable gloves tested to EN374 this risk can be avoided.

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
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
DFG	Deutsche Forschungsgemeinschaft MAK-und BAT-Werte-Liste, Senatskommission zur Prüfung gesundheitsschädlicher Arbeitsstoffe, Wiley-VCH, Weinheim
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IMDG	International Maritime Dangerous Goods Code

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Abbr.	Descriptions of used abbreviations
index No	the Index number is the identification code given to the substance in Part 3 of Annex VI to Regulation (EC) No 1272/2008
MARPOL	International Convention for the Prevention of Pollution from Ships (abbr. of "Marine Pollutant")
PBT	Persistent, Bioaccumulative and Toxic
ppm	parts per million
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
TWA	time-weighted average
VOC	Volatile Organic Compounds
vPvB	very Persistent and very Bioaccumulative

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)

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

International Maritime Dangerous Goods Code (IMDG).

International Air Transport Association (IATA).

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