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

1.1. Product identifier

ACMOS 36-7616

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

Relevant identified uses

Release agent for PUR

Uses advised against

The product is for industrial and professional use only - no consumer product.

1.3. Details of the supplier of the safety data sheet

Manufacturer

Company name:	ACMOS CHEMIE KG	
Street:	Industriestrasse 49	
Place:	D-28199 Bremen	
Post-office box:	10 10 69 D-28010 Bremen	
Telephone:	+49 (0)421-5189-0	Telefax: +49 (0)421-511415
e-mail:	acmos@acmos.com	
Contact person:	Mr. Dryhaus	
Internet:	www.acmos.com	
Responsible Department:	Laboratory (Division : Occupational- / Product security) - See under section 16	

Supplier

Company name:	ACMOS CHEMIE KG	
Street:	Industriestrasse 49	
Place:	D-28199 Bremen	
Post-office box:	10 10 69 D-28010 Bremen	
Telephone:	+49 (0)421-5189-0	Telefax: +49 (0)421-511415
e-mail:	acmos@acmos.com	
Contact person:	Mr. Dryhaus	
Internet:	www.acmos.com	
Responsible Department:	Laboratory (Division : Occupational- / Product security) - See under section 16	

1.4. Emergency telephone number:

+49 (0)551-19240 (Emergency information service / official advisory body: Giftinformationszentrum Nord, Universität Göttingen, 24 h service)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

R phrases:
Flammable.
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
Repeated exposure may cause skin dryness or cracking.
Vapours may cause drowsiness and dizziness.

This mixture is classified as hazardous according to the new EC-preparation directive 1999/45/EC.

2.2. Label elements

R phrases

10	Flammable.
52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
66	Repeated exposure may cause skin dryness or cracking.
67	Vapours may cause drowsiness and dizziness.

S phrases

23	Do not breathe spray .
24	Avoid contact with skin.
43	In case of fire, use sand, dry chemical or alcohol-resistant foam . Never use water.
61	Avoid release to the environment. Refer to special instructions / Safety data sheets.

Additional advice on labelling

The product is classified and labelled in accordance with the CHIPS Regulations 1994.
Preparation Directive 1999/45/EC.

2.3. Other hazards

Adverse physicochemical effect(s) :
See section 9 for physical and chemical properties.
Adverse human health effect(s) and symptom(s) :
See section 11 for toxicological information.
Adverse environmental effect(s) :
See section 12 for environmental information.
Other adverse Hazard(s) :
No special remarkable hazards.
Results of PBT-/vPvB-assesment : See under section 12.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Dispersion of waxes and surfactants in a mixture of solvents

Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification	
Index No	GHS classification	
REACH No		
927-241-2	hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics	60 - < 65 %
64742-48-9	Xn - Harmful R10-52-53-65-66-67	
	Flam. Liq. 3, STOT SE 3, Asp. Tox. 1, Aquatic Chronic 3; H226 H304 H336 H412	
01-2119471843-32		
918-167-1	hydrocarbons, C11-C12, isoalkanes, <2% aromatics	15 - < 20 %
90622-57-4	Xn - Harmful R53-65-66	
	Asp. Tox. 1, Aquatic Chronic 4; H304 H413	
01-2119472146-39		

Further Information

Subdivision of relevant R-, H-, EUH-Phrases in full text (number and wording) see under section 16.

The above mentioned EC-No. (Provisional List Number 9xx-xxx-x) is a specific subset of the specified CAS-No. and was associated with the registration process automatically (without CAS-No. or numeric identifier). An official announcement by the EC inventory will follow after evaluation of substance identity by the ECHA. The new nomenclature of hydrocarbon solvents is only related with group names of the HSPA (Hydrocarbon Solvents Producers Association). The previously used CAS-No. continues serving as a reference for different global inventories.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Take off all contaminated clothing immediately. Wash contaminated clothing before re-use.
If victim has stopped breathing: Artificial respiration and/or oxygen may be necessary.
If victim is unconscious but breathing: Victim to lie down in the recovery position, cover and keep him warm.
If victim is conscious: Move out of dangerous area.
If a person vomits when lying on his back, place him in the recovery position.
Consult a physician if necessary Show this safety data sheet to the doctor in attendance.

Protection of first-aiders :
wear personal protective equipment See under section 8.

Notes to physician :
Aspiration may cause pulmonary oedema and pneumonitis. Symptoms may be delayed.

After inhalation

Move to fresh air in case of accidental inhalation of vapours. In case of shortness of breath, give oxygen.
Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness, cessation of breathing. If symptoms persist, call a physician.

After contact with skin

Wash off with soap and water.
Preventive skin protection.

After contact with eyes

Rinse thoroughly with plenty of water for at least 15 minutes and consult a physician.
If eye irritation persists, consult a specialist.

After ingestion

Do not induce vomiting. Consult a physician.
Risk of product entering the lungs on vomiting after ingestion.
Never give anything by mouth to an unconscious person.

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

See under section 11.

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

Treat symptomatically.

In case of ingestion, the stomach should be emptied by gastric lavage under qualified medical supervision.
Later control for pneumonia and lung oedema.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
water spray, sand, foam, dry chemical, carbon dioxide (CO2)

Extinguishing media which must not be used for safety reasons

Do not use a solid water stream as it may scatter and spread fire.

5.2. Special hazards arising from the substance or mixture

Fire will produce dense black smoke containing hazardous combustion products.
Under conditions giving incomplete combustion, hazardous gases produced may consist of : Carbon monoxide, carbon dioxide (CO2), hydrocarbons, smoke
In principle, fire gasses of organic materials have to be classified as toxic to the respiratory system.

5.3. Advice for firefighters

In the event of fire, wear self-contained breathing apparatus.
In the event of fire and/or explosion do not breathe fumes.

Move to fresh air in case of accidental inhalation of fumes from overheating or combustion.

Additional information

Usual measures of preventive and averting fire protection.
In the event of fire, cool tanks with water spray.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Avoid contact with skin and eyes. Try to avoid breathing vapours or spray mist.
Remove all sources of ignition. Do not smoke.
Keep people away from and upwind of spill/leak.
Prevent further leakage or spillage if safe to do so.
Ensure adequate ventilation.

For non-emergency personnel :
Walk out of the danger zone and notify trained personnel.
If necessary, wear personal protective equipment. Never enter into a personal risk. See under section 8.
Keep the factory emergency plan and the information chain.

For emergency responders :
The personal protective equipment must be adapted to the situation.

6.2. Environmental precautions

Do not flush into surface water or sanitary sewer system.

6.3. Methods and material for containment and cleaning up

Clean-up methods - large spillage : Dam up. Shovel into suitable container for disposal. Local authorities should be advised if significant spillages cannot be contained.
Clean-up methods - small spillage : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Take up mechanically and collect in suitable container for disposal.

6.4. Reference to other sections

Further information see under section 8, 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Prevent the creation of flammable or explosive concentrations of vapour in air and avoid vapour concentration higher than the occupational exposure limits. The product should only be used in areas from which all naked lights and other sources of ignition have been excluded. Use only in well-ventilated areas. When using, do not eat, drink or smoke.

Advice on protection against fire and explosion

Measures according to German "Explosion rules" required :
Prevention measures regarding formation of explosible atmosphere (restriction and supervision of concentration, inertisation, airtightness, ventilation, warning device, etc.).
Prevention measures regarding ignition of explosible atmosphere (zone graduation, removing of ignition sources, explosion-proof electrical installation, earthing, etc.).
Constructive measures for restriction of effects regarding explosions (resistance to pressure of explosions, discharge of pressure of explosions, suppression of explosions, etc.).

Take precautionary measures against static discharges. Preparation may charge electrostatically: always use earthing leads when transferring from one container to another. To avoid ignition of vapours by static electricity discharge, all metal parts of the equipment must be grounded. Do not use pressure to empty drums.
Keep product and empty container away from heat and sources of ignition. Do not smoke.
An explosible atmosphere may be build in partially and totally emptied containers.

Vapours may form explosive mixture with air.
Spray mist may be flammable at temperatures below the flash point.
Vapours are heavier than air and may spread along floors.
Electrical equipment should be protected to the appropriate standard.
Fire-fighting equipment on the basis of class B.

Further information on handling

Reference on types of contact requiring special precautionary measures :
Particularly at work places with filling and transfer procedures into other containers, as well as with weightening and mixture processes an effective exhaust ventilation has to be guaranteed.
For restriction of emission on volatile organic compounds (VOC) the solvent vapours should be supplied to an exhaust air purification facility (filter, gas washer, incineration).

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep containers tightly closed in a cool, well-ventilated place.
The valid water and zoning ordinances must be observed.
Design solvent resistant and tight floor.

Advice on storage compatibility

Stable under recommended storage conditions.
Incompatible with oxidising agents.

Further information on storage conditions

Indoor stockability in closed unopened original containers : 6 months.
Store at room temperature in the original container.
Keep at temperatures between +10 and +30 °C.
Do not store outside. Avoid heating and direct sunlight.
See also instuctions on the label.

7.3. Specific end use(s)

Possibilities for substitution and references to less hazardous products :
This product was designed for a special application purpose and optimized appropriately.
In case of questions regarding product and application, please contact our field service in line with customer service or our technical sales department.

Specific regulations of branch industries :
Hazardous substance information systems of professional associations.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional advice on limit values

Recommended monitoring and observation processes : None known.

Control banding for chemicals according to the ILO CHEMICAL CONTROL TOOLKIT (ICCT) :
ICCT-Guidelines and - Control Guidance Sheets :
http://www.ilo.org/legacy/english/protection/safework/ctrl_banding/toolkit/main_guide.pdf
Consider appropriate model solutions according to good engineering practices on designing the working process, if available.

8.2. Exposure controls

Appropriate engineering controls

Design of appropriate work processes and engineering controls and the use of adequate materials (closed systems with gas-displacement, physical cut-off of man and machine, model solutions as certified working methods, working appliance according to the state of the art, optimization of process / spray robots, working appliance for prevention of skin contact, models of working times).

Preliminary concentration measurements :
Suitable detector tubes for measuring the current concentration in the air at the workplace : DRÄGER test tubes - short-term tubes (Internet : http://www.gasmesstechnik.de)

References for design of technical equipment : See under section 7.

Execution of collective protection measures at source and appropriate organisational measures (local exhaust ventilation, ventilation by technical means, general ventilation, measures on averting a danger at breakdowns / at emergencies / after accidents, first-aid-measures, manner related measures : operating instruction / instruction of employees, occupational medicine health precaution).
Provide appropriate exhaust ventilation at machinery. Where reasonably practicable this should be achieved by the use of local exhaust ventilation and good general extraction. If these are not sufficient to maintain concentrations of particulates and solvent vapour below the OEL, suitable respiratory protection must be worn.

Execution of individual and personnel protection measures (personal protective equipment - PPE).

Individual protection measures, such as personal protective equipment

When using, do not eat, drink or smoke. General industrial hygiene practice.
Handle in accordance with good industrial hygiene and safety practice.

Respiratory protection

Breath protection at insufficient ventilation or prolonged exposition.
Breathing apparatus needed only when aerosol or mist is formed.
Observe limited carrying time. The use of filter equipment requires a minimum oxygen content of 17 Vol-% in the surrounding atmosphere and that the maximum permitted gas concentration - normally 0,5 Vol-% - is not exceeded.

Half mask or quarter mask with combination filter A1P1/A2P2 for gases, vapors and particles.
Filtering half mask or quarter mask with combination filter FFA1 P1/FFA2P2 for gases, vapors and particles. (EN 405)
Gas filtrating Half-face mask FFA (EN 405)
Model 4251 (FFA1P1 - 1000 ml/m3) / 4255 (FFA2P2SL - 5000 ml/m3) - 3M, Internet : http://www.3m.com
Half-face mask or Quarter-face mask with gas filter (EN 140)
Filter type 6051 (A1 - 1000 ml/m3) / 6055 (A2 - 5000 ml/m3) - 3M, Internet : http://www.3m.com
Full-face mask with gas filter (EN 136)
Gas filter type : A, Indication colour : brown

Skin protection

Hand protection :
Use only chemical protective gloves with CE-status of category III in accordance to EN 374. Suitable materials at long term, direct contact (Recommended : Preventive index 6, accordingly > 480 min. permeation time in accordance to EN 374) :

Fluorine rubber / FKM / Viton (VITOJECT® - Art. No. 890) - Layer thickness : 0,7 mm
Nitrile rubber / NBR (CAMATRIL VELOURS® - Art. No. 730) - Layer thickness : 0,4 mm

Suitable materials at short term contact or splash (Recommended : Preventive index 3, accordingly > 60 min. permeation time in accordance to EN 374) :

Disposable gloves of special nitrile rubber / NBR (DERMATRIL® P - Art. No. 743) - Layer thickness : 0,2 mm

Manufacturer :
Kächele-Cama Latex GmbH, Industriepark Röhn, Am Kreuzacker 9, D-36124 Eichenzell, c/o Tony O'Donovan, 2 Wyndham Road, New Waltham, Grimsby, N. E. Lincs, GB-DN36 4WA
Telephone : +44-(0)1472232883, Telefax : +44-(0)1472232883, Internet : http://www.kcl.de, E-Mail : kcl-uk@kcl.de

The statements are based on self-tests, literary reference and information of glove manufacturers or have been derived from similar substances by analogy. Source : CHEMIKALIEN-MANAGER - KCL software for hand protection. It has to be noticed, that daily time of use of chemical protective gloves may be quite shorter in practice because of many factors of influence (e.g. thermal and mechanical stress as well as special conditions on the floor) than the permeation time determined in accordance to EN 374. The respective permeation time doubles/halvens at about 1,5 times larger/lower layer thickness. Declared permeation times according to EN 374 are not carried out under practical conditions. Therefore a maximum wearing time up to 50 % of breakthrough time is recommended. They relate to the pure solvent as mean component.

Decrease wearing protection gloves to an inevitable degree to avoid skin rash. Technical and organizational protective actions have to be preferred. Wear under gloves made of cotton as possible. Change preventive gloves once by hour or use special skin-protective preparations for protective gloves carrier, e.g. physioderm® proGlove
Before removing gloves clean them with soap and water. Dispose preventive gloves after defect or expiry of wearing time. Check protective gloves to proper condition before usage.

Preventive skin protection. : Draw up skin protection programme.
Before starting work, apply solvent-resistant skincare preparations,
e.g. sansibal® / sansibon®, dualin®
Wash hands before breaks and on finishing work,
e.g. ecosan®, topscrub® soft / topscrub® extra / topscrub® nature
After cleansing, apply greasy skincare products,
e.g. physioderm® creme, cura soft® / cUrea soft®

Manufacturer :
Peter Greven Physioderm GmbH, Procter-&-Gamble-Str. 26, D-53881 Euskirchen
Telephone : +49-(0)2251 77617-61, Telefax : +49-(0)2251 77617-44, Internet : http://www.physioderm.de, E-Mail : info@physioderm.de

Other :
Skin protection :
Light protective clothing (EN 340) :
Protective clothing (Category III according to EN 374, Type 4) - Spray tight clothing with protection against liquid aerosols (EN 14605, EN 468),
e.g. TYVEK Classic Plus - Type 4/5/6 (Internet : http://www.dpp-europe.com/?lang=en),
safety shoes, antistatic boots (EN 344)

Eye / face protection
safety glasses with side-shields (EN 166)

Thermal hazards
No thermal hazards during use of this product.

Environmental exposure controls

Should not be released into the environment. Discharge exhaust air only with suitable seperators to atmosphere.
Further information see under section 6.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid
Colour:	off-white
Odour:	characteristic

	Test method
pH-Value:	Not applicable

Changes in the physical state

Melting point:	not determined	
Boiling point:	> 140 °C	Literary reference
Sublimation point:	Not applicable	
Softening point:	not determined	
Flash point:	> 24 °C	EN ISO 2719

Explosive properties

In use, may form flammable/explosive vapour-air mixture. The statements for steam pressure, ignition point and explosion levels apply to the solvent / solvent mixture.

Lower explosion limits:	0,6 vol. %	Literary reference
Upper explosion limits:	7,0 vol. %	Literary reference
Ignition temperature:	> 200 °C	Literary reference

Oxidizing properties

Not applicable

Vapour pressure: (at 20 °C)	< 5 hPa	Literary reference
Vapour pressure: (at 50 °C)	< 24 hPa	Literary reference
Density (at 20 °C):	0,78 g/cm³	DIN 51757
Water solubility:	< 0,1 g/L	Literary reference
Solubility in other solvents:	miscible with most organic solvents	
Partition coefficient:	Not applicable (Preparation)	
Viscosity / dynamic:	not determined	
Viscosity / kinematic: (at 23 °C)	> 7 mm²/s	3 EN ISO 2431
Flow time: (at 23 °C)	> 30 s	3 EN ISO 2431
Vapour density: (at 25 °C)	~4.0 (Air=1), M~126 g/mol	Literary reference
Evaporation rate: (at 20 °C)	< 0.6 (n-BuAc=1)	ASTM D 3539
Solvent separation test:	Not applicable	
Solvent content:	not determined	

9.2. Other information

Solid content:	not determined

Gas group (94/9/EC) : IIA (maximum experimental safe gap > 0,9 mm)
Temperature class (94/9/EC) : T3 (T > 200 °C ... <= 300 °C)
Conductivity : < 10E-08 S/m

Odor threshold : no data available

SECTION 10: Stability and reactivity

10.1. Reactivity

No decomposition if stored and applied as directed.

10.2. Chemical stability

Stable at normal conditions

10.3. Possibility of hazardous reactions

Exothermic reaction : See under section 10.5.

10.4. Conditions to avoid

Heat, flames and sparks.
Further information see under section 7.

10.5. Incompatible materials

oxidising agents

10.6. Hazardous decomposition products

No decomposition if stored and applied as directed.
Under fire conditions: See under section 5.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicocinetics, metabolism and distribution

No toxical dates available. Not proofed mixture.
The product was classified according to the conventionally method (based on the calculation procedure of the new EC-preparation directive 1999/45/EC).

Information on likely routes of exposure /
Symptoms related to the physical, chemical and toxicological characteristics :

After ingestion :
Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhoea.
Risk of product entering the lungs on vomiting after ingestion.
Aspiration may cause pulmonary oedema and pneumonitis.
Based on available data, the classification criteria are not met.

After inhalation :
Inhalation of aerosols may cause irritation to mucous membranes.
Inhalation of vapours in high concentration can cause narcotic effects and metabolic acidosis .
Symptoms of overexposure are dizziness, headache, tiredness, nausea, unconsciousness, cessation of breathing.

After skin contact :
May cause skin irritation in susceptible persons. Repeated or prolonged contact with the preparation may cause removal of natural fat from the skin resulting in non-allergic contact dermatitis and absorption through the skin.
Solvents may degrease the skin.

After eye contact :
Contact with eyes may cause irritation.
High concentration of vapours may cause irritation to eyes and respiratory system and produce narcotic effects .

Delayed and immediate effects as well as chronic effects from short and long-term exposure :
Not relevant / no data available

Interactive effects :
Not relevant / no data available

Absence of specific data :
No data is available on the product itself. Description of possible hazardous to health effects is based on experience and/or toxicological characteristics of several components.
Based on manufacturer datas of the main components the acute toxixity, the skin irritation, the mucous membrane irritation and the mutagenic potential of the mixture were evaluated. However, some datas are not complete regarding

particular main components. Nevertheless according to the experience of the manufacturer there are no other hazards expected then those which are already mentioned on the label.

Mixture versus substance information :
Not relevant / no data available

Acute toxicity

The following informations are derived from the properties of the individual components.
LD50/oral/rat = > 2000 mg/kg
LD50/dermal/rabbit = > 2000 mg/kg
LC50/inhalation/4h/rat = > 20 mg/l

CAS No	Chemical name				
	Exposure routes	Method	Dose	Species	h
64742-48-9	hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics				
	Acute oral toxicity	LD50	> 5000 mg/kg	rat	
	Acute dermal toxicity	LD50	> 2000 mg/kg	rat	
	Acute inhalation toxicity	LC50	> 5,6 mg/l	rat	4
90622-57-4	hydrocarbons, C11-C12, isoalkanes, <2% aromatics				
	Acute oral toxicity	LD50	> 5000 mg/kg	rat	
	Acute dermal toxicity	LD50	> 3160 mg/kg	rabbit	
	Acute inhalation toxicity	LC50	> 5,6 mg/l	rat	4

Irritation and corrosivity

Based on available data, the classification criteria are not met.

Sensitising effects

After inhalation : Based on available data, the classification criteria are not met.
After skin contact : Based on available data, the classification criteria are not met.

Severe effects after repeated or prolonged exposure

Subacute to chronical toxicity :
Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

Other information

no data available

SECTION 12: Ecological information

12.1. Toxicity

No ecotoxical dates available. Not proofed mixture.
The product was classified according to the conventionally method (based on the calculation procedure of the new EC-preparation directive 1999/45/EC).

Aquatic toxicity (Fish toxicity, Algae toxicity, Daphnia toxicity) :
The following informations are derived from the properties of the individual components.
LC50/96h/guppy = 10 mg/l < LC50 < 100 mg/l
EC50/72h/algae = 10 mg/l < EC50 < 100 mg/l
EC50/48h/daphnia = 10 mg/l < EC50 < 100 mg/l

Terrestric toxicity (Bird toxicity, Beneficial insect, Rainworm toxicity) : no data available
Plant toxicity : no data available
Behaviour in waste water treatment plants : no data available

CAS No	Chemical name			
	Aquatic toxicity	Method Dose	Species	h
64742-48-9	hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics			
	Acute fish toxicity	LC50 > 10-30 mg/l	Oncorhynchus mykiss	96 h
	Acute algae toxicity	ErC50 > 1000 mg/l	Pseudokirchnerella subcapitata	72 h
	Acute crustacea toxicity	EC50 > 22-46 mg/l	Daphnia magna	48 h
90622-57-4	hydrocarbons, C11-C12, isoalkanes, <2% aromatics			
	Acute fish toxicity	LC50 > 1000 mg/l	Oncorhynchus mykiss	96 h
	Acute algae toxicity	ErC50 > 1000 mg/l	Pseudokirchnerella subcapitata	72 h
	Acute crustacea toxicity	EC50 > 1000 mg/l	Daphnia magna	48 h

12.2. Persistence and degradability

Abbiotic degradation (Hydrolysis, Photolysis) : Not applicable
Physicochemical elimination (Oxidation, Hydrolysis) : Not applicable
Photochemical elimination (Photooxidation) : no data available
Biodegradation :
hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics :
Readily biodegradable (> 70 % after 28 days) - OECD 301E, C.4-D

12.3. Bioaccumulative potential

Partition coefficient n-octanol /water (log Pow) : Not applicable (Preparation)
Bioconcentration factor (BCF) : Not applicable (Preparation)

12.4. Mobility in soil

Surface tension : no data available
Transport soil-water (Adsorption coefficient) : The product is insoluble and floats on water.
Transport water-air (volatility rate, Henry-constant) : The product evaporates readily.
Transport soil-air (volatility rate) : The product evaporates readily.

This product contains one or more hydrocarbon UVCB's. Standard tests for this endpoint are intended for single substances and are not appropriate for this complex substance.

12.5. Results of PBT and vPvB assessment

The product is neither a PBT- or vPvB-substance nor it contains PBT or VPvB substances.

12.6. Other adverse effects

Ozone depletion potential (ODP) : no data available
Photochemical ozone building potential (OBP) : no data available
Global warming potential (GWP) : no data available

Product does not contain any organic halogens. (AOX)

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

Disposal according to offical regulations. Do not flush into surface water or sanitary sewer system. Do not dispose of waste into sewer. May not be disposed or deposited together with domestic garbage. Pack product waste or close and label uncleaned empty packages in respect to the local and official regulations and supply to an appropriate way of disposal.

The relation of waste-codes according to EWC has to be realized by branch and process. The waste producer is resposible for correct coding and designation of his wastes. For small amounts (< 20 kg/L) contact next special waste counter or a mobile service for harmful substances. Before discharge in public drains (e.g. residues of washing- and rinsing liquids) please observe the relevant regulations. In case of further questions please contact your waste- or environmental representative or the responsible authority.
List of proposed waste codes / waste designations in accordance with EWC :

Waste disposal number of waste from residues/unused products

070204 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of plastics, synthetic rubber and man-made fibres; other organic solvents, washing liquids and mother liquors
Classified as hazardous waste.

Waste disposal number of used product

070204 WASTES FROM ORGANIC CHEMICAL PROCESSES; wastes from the MFSU of plastics, synthetic rubber and man-made fibres; other organic solvents, washing liquids and mother liquors
Classified as hazardous waste.

Waste disposal number of contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by dangerous substances
Classified as hazardous waste.

Contaminated packaging

Contaminated packages must be completely emptied and may be reused after proper cleaning. Dipose of packages that cannot be cleaned like the product. Cleaning by recycling company.
Take into account, that also empty, uncleaned containers include product residues, that may form explosible mixtures. They have to be disposed by specialists or have to be supplied to a licensed reconditioning. The conditions of the regional reconditioning companies have to be observed.
Offer rinsed packaging material to local recycling facilities.
Recommended cleansing agent : Clean with detergents. Avoid solvents. Dispose of rinse water as waste water. Do not contaminate water.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:	UN1268
14.2. UN proper shipping name:	PETROLEUM PRODUCTS, N.O.S.
14.3. Transport hazard class(es):	3
14.4. Packing group:	III
Hazard label:	3

Hazard No:	30
Tunnel restriction code:	D/E

Other applicable information (land transport)

Maximum permissible total quantity per unit of carriage according to subsection 1.1.3.6 ADR/RID : 1000 L.
Factor out of category of carriage (= 3) to calculate the quantity per unit of carriage : 1.
Limited quantities according to chapter 3.4 ADR/RID : liquids not more than 5 litre(s) per inner packaging and not more than 30 kg gross per package (LQ 7 - ADR 2009).

Classification code : F1
Special provision(s) : None known
Provision(s), multilateral agreement(s) : Not applicable

Tunnel restriction code : D/E

EMPTY PACKAGING or EMPTY IBC, 3

Inland waterways transport (ADN)

Other applicable information (inland waterways transport)
Not relevant

Marine transport (IMDG)

14.1. UN number:	UN1268
14.2. UN proper shipping name:	PETROLEUM PRODUCTS, N.O.S.
14.3. Transport hazard class(es):	3
14.4. Packing group:	III
Hazard label:	3

Marine pollutant:	--
EmS:	F-E, S-E

Other applicable information (marine transport)
Limited quantity according to chapter 3.4 IMDG-Code : liquids not more than 5 litre(s) per inner packaging and not more than 30 kg gross per package.

Special provision(s) : 223, 955
Exception(s) : Not applicable

Air transport (ICAO)

UN/ID number:	UN1268
14.2. UN proper shipping name:	PETROLEUM PRODUCTS, N.O.S.
14.3. Transport hazard class(es):	3
14.4. Packing group:	III
Hazard label:	3

IATA-packing instructions - Passenger:	355/Y344
IATA-max. quantity - Passenger:	60 L/10 L
IATA-packing instructions - Cargo:	366
IATA-max. quantity - Cargo:	220 L

Other applicable information (air transport)
The state variations in chapter 2.8.1 and the operator variations in chapter 2.8.3 for shipping of dangerous goods in limited quantities according to chapter 2.8 of the valid ICAO/ IATA Dangerous Goods Regulations have to be observed.

Special provision(s) : A3
ERG Kodex : 3L

The rulings for dangerous goods by air mail according to chapter 2.4 of the valid ICAO/ IATA Dangerous Goods Regulations and the conventions of the Universal Postal Union (UPU) as well as the clauses of the relevant National Postal Administation have to be observed. Airmail : prohibited.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Further information see under section 6, 7, 8.

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

No bulk transport in accordance with IBC code.
It is sold exclusively in traffic legally authorized and appropriate packaging.

Other applicable information

Postal, express and courier services :
Postal service (national) :
Refer to your National Postal Administation.
Express freight / special delivery :
Refer to your National Postal Administation.
Courier service (national) :
The general conditions of business of the particular courier service have to be observed.

SECTION 15: Regulatory information

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

EU regulatory information

1999/13/EC (VOC):	Content of volatile organic compounds (VOC) = 78 % w/w. VOC-value (25 °C) = 608 g/L.

Additional information

Informations on Regulation (EC) No. 1272/2008 - Annex VI, Part 1 :
Note P is valid : The classification as a carcinogen or mutagen need not apply if it can be shown that the substance contains less than 0,1 % w/w benzene (EINECS No 200-753-7) (< 1 mg/kg - DIN 51405, ASTM D 4367).

Regulation (EC) No 1005/2009 - Substances that deplete the ozone layer : Not applicable
Regulation (EC) No 648/2004 and No 907/2006 - Detergents : Not applicable
Regulation (EC) No 850/2004 and No 519/2012 - Persistent organic pollutants : Not applicable
Regulation (EC) No 649/2012 - Export and import of dangerous chemicals : Not applicable
Regulation (EC) No 552/2009 - Restriction of chemicals (REACH) as regards annex XVII : Not applicable

Authorisation of Chemicals (REACH) as regards Annex XIV : Not applicable

Directive 2004/42/EC - Use of organic solvents in certain paints and lacquers : Not applicable
Directive 96/82/EC - Control of major accident hazards involving dangerous substances (Seveso II), as last amended by Directive 2003/105/EC :
Annex I, Part 1 (including substances listed) :
Petroleum products : a) gasoline and naphtha (column 1).
Quantities : > 2.500.000 kg (column 2) /> 25.000.000 kg (column 3).

EC-Chemical inventories : All ingredients are listed in EINECS / ELINCS or excepted from listing.

A chemical safety assessment (CSA) has been carried out on following substance(s) :
hydrocarbons, C9-C10, n-alkanes, isoalkanes, cyclics, <2% aromatics, EC-No. : 927-241-2
hydrocarbons, C11-C12, isoalkanes, <2% aromatics, EC-No. : 918-167-1

National regulatory information

Employment restrictions:	Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing.
Water contaminating class (D):	1 - slightly water contaminating

Additional information

International chemical inventories (Registration status on substances) : no data available

European product inventories (Registration status on mixtures) :
Istituto Superiore di Sanità / Archivio Preparati Pericolosi - ISS (http://www.preparatipericolosi.iss.it/iss/index.phtml) :
This product was not registered.
Kemikalieinspektionen / Produktregistret / Swedish Chemicals Inspectorate - KemI (http://apps.kemi.se/nclass/default.asp) :
This product was not registered.
Schweizerische Eidgenossenschaft - Bundesamt für Gesundheit - BAG (http://www.bag.admin.ch) / Informationssystem für gefährliche und umweltrelevante Stoffe - IGS (http://igs.naz.ch/index.html) :
This product was not registered.

Other regulations, restrictions and prohibition regulations :
FDA-status : The product may not be used in agreement with existing regulation in applications with direct food contact.
NSF-listing of food compatible substances : Not appropriated.

SECTION 16: Other information

Changes
Safety data sheet was drawn up newly.

Disclaimer :
The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release The receiver of our product is singulary responsible for adhering to existing laws and regulations. All descriptions are approximate values, they are not specified for construction of specifications. This safety data sheet does not represent any operating instruction according to national chemical regulations. It may be used for creation, but must not replace it. The employer is not relieved from his duties. All technical information to occupational protection are directed predominately to experts first (safety engineers, occupational medicines).

Abbreviations and acronyms
ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road.
CAS: Chemical Abstracts Service.
DNEL: Derived No-Effect Level.
EC: European community.
EINECS: European Inventory of Existing Commercial Chemical Substances.
ELINCS: European List of Notified Chemical Substances.
EN: European standard.
FDA: US-Food and Drug Administration.
GHS: Globally Harmonized System of Classification and Labelling of Chemicals.
IATA-DGR: International Air Transport Association Dangerous Goods Regulations.
IBC-Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk (International Bulk Chemical Code).
IC50 / ErC50: Inhibitory concentration, 50 percent.
ICAO-TI: International Cicil Aviation Organization Technical Instruction.
IMDG-Code: International Maritime Dangerous Goods Code.
ISO: A standard of International Standards Organisation.
LC50: Lethal concentration, 50 percent.
LD50: Lethal Dose, 50 percent.
log Kow (Pow): octanol-water partition coefficient.
MARPOL: Maritime Pollution Convention (Convention for the Prevention of Pollution from Ships).

OECD: Organisation for Economic Co-operation and Development.
PBT: Persistent, bioaccumulabe and toxic.
PNEC: Predicted No-Effect Concentration.
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.
UN: United Nations.
vPvB: Very persistent and very bioaccumulable.

Full text of R phrases referred to under Sections 2 and 3

10	Flammable.
52	Harmful to aquatic organisms.
52/53	Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
53	May cause long-term adverse effects in the aquatic environment.
65	Harmful: may cause lung damage if swallowed.
66	Repeated exposure may cause skin dryness or cracking.
67	Vapours may cause drowsiness and dizziness.

Full text of H statements referred to under Sections 2 and 3

H226	Flammable liquid and vapour.
H304	May be fatal if swallowed and enters airways.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.
H413	May cause long lasting harmful effects to aquatic life.

Further Information

Full text of all R-phrases which are referred to in section 2 and 3 of this safety data sheet - see previous list. These (this) R-phrases/R-phrases apply/applies to the substance(s) of content, however, it does not necessarily show the classification of the product.

Training references :
Yearly briefing and instruction of employees by means of operating instructions according to article 8 of EC-directive 98/24/EC.

Recommended restriction of application :
For more reference to application see separate product information. Please refer to our internet website for more information.

Sources of most important data used for creation of the data sheet :
The classification corresponds to current EC-lists, but is completed by statements of technical literature and company data. Other public accessible sources :
Regulation (EC) No. 1907/2006 (REACH) in the valid version in each case
Regulation (EC) No. 1272/2008 (CLP) in the valid version in each case
Substance Directive 67/548/EEC in the valid version in each case
Preparation Directive 1999/45/EC in the valid version in each case
European Agency for Safety and Health at Work - national air treshold values from european member states - EH 40 (http://osha.europa.eu/good_practice/topics/dangerous_substances/oel/members.stm)
Transport regulations according to ADR, IMDG-Code and IATA-DGR in the valid versions in each case
European Chemical Substances Information System - ESIS (http://ecb.jrc.ec.europa.eu/esis)
MERCK Chemical Databases - MERCK Chemicals (http://www.merck-chemicals.com)

Further information and practical guides on the internet :
European Chemicals Agency - ECHA (http://ec.europa.eu/echa)
The access to European Union law - EUR-Lex (http://eur-lex.europa.eu)
Control of Substances Hazardous to Health Regulations - COSHH (http://www.coshh-essentials.org.uk/Home.asp)
Pollution Prevention and Control Act and Pollution Prevention and Control Regulations
Health and Safety Executive - HSE - Leaflets for Chemicals (http://www.hse.gov.uk/pubns/chindex.htm)

Classification of mixtures and used evaluation methods in accordance with Regulation (EC) No 1272/2008 (CLP) :

The transition period according to CLP-Regulation (Article 61) has not been expired yet.

Inquiry office : Laboratory (Division : Occupational- /Product security)
Contact person : Mr. Dryhaus (Telephone : +49-421-5189-0, Telefax : +49-421-5189-871)
Office hours : Mo - Th from 7.30 - 16.15 h and Fr from 7.30 - 13.30 h. Out of office hours no call diversion.