

**Safety Data Sheet**

according to 29 CFR 1910.1200(g)

ACMOScoat 36-9010

Print date: 16.02.2016

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1. Identification**Product identifier**

ACMOScoat 36-9010

Recommended use of the chemical and restrictions on use**Relevant identified uses**

Release spray

Uses advised against

The product is intended for professional use.
Do not use for private purposes (household).

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
e-mail: acmos@acmos.com
Contact person: Mr. Stephan Dryhaus
Internet: www.acmos.com
Responsible Department: Laboratory (Division: Occupational- / Product security) - see under section 16
Emergency phone number: 01149 (0)551 19240 (Emergency information service / official advisory body:
Giftinformationszentrum Nord, Universität Göttingen, 24 h from mo. - su.)
Language(s) of Telephone Service: DE, EN

Supplier

Company name: ACMOS Inc.
Street: 1407 York Road, Suite 305
Place: USA-MD 21093 Lutherville
Telephone: 001-410-296-5994
e-mail: acmosinc@acmosinc.com
Contact person: Mr. Reinhard E. Zuber
e-mail: reinhard@acmosinc.com
Internet: www.acmosinc.com
Emergency phone number: 1-800-424-9300 (CHEMTREC - 24/7 - Within the USA and Canada)
Language(s) of Telephone Service: EN, FR

2. Hazard(s) identification**Classification of the chemical**

Hazard categories:
Flammable aerosols: Flam. Aerosol 1
Gases under pressure: Compressed gas
Skin corrosion/irritation: Skin Irrit. 2
Specific target organ toxicity single exposure: STOT SE 3
Hazard Statements:
Extremely flammable aerosol
Contains gas under pressure; may explode if heated
Causes skin irritation
May cause drowsiness or dizziness

Label elements

Signal word:

Danger

Pictograms:

**Hazard statements**

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Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Do not spray on an open flame or other ignition source.
Pressurized container: Do not pierce or burn, even after use.
Avoid breathing spray.
Wear protective gloves/protective clothing/eye protection.
If on skin: Wash with plenty of Water and soap.
Call a poison center/doctor if you feel unwell.
Store in a well-ventilated place. Keep container tightly closed.
Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

Additional advice on labelling

Labelling according to the revised Hazard Communication Standard (HCS 2012) according to 29 CFR 1910.1200(f)

Hazards not otherwise classified

Adverse physicochemical effects:
See section 9 for physical and chemical properties.
The vapour of the product is heavier than air and may accumulate below ground level, in pits, channels and basements in higher concentration.
The accumulation in lowlying or closed rooms can cause increased danger of fire and explosion.
Vapours can travel considerable distances to a source of ignition where they can ignite, flash back, or explode.
Vapours of flammable solvents can accumulate in the gas phase of closed container, especially during heat treatment.
Therefore keep away from fire and sources of ignition.
This material can be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, mechanical/electrical equipment, and electronic devices such as cell phones, computers, calculators, and pagers which have not been certified as intrinsically safe).
The product will be applied by spraying.
In use, may form flammable/explosive vapour-air mixture.
Even after use and until complete evaporation of the flammable components, there is still a danger of an explosive steam-air mixture forming.
The product does have a sealed spraying device.
Caution! Container under pressure.

Adverse human health effects and symptoms:
See section 11 for toxicological information.

Adverse environmental effects:
See section 12 for environmental information.

Other adverse effects:
No special remarkable hazards.

Results of PBT-/vPvB-assesment:
See under section 12.5 - Results of PBT and vPvB assessment.

3. Composition/information on ingredients**Mixtures****Chemical characterization**

Aerosole : Active ingredients with propane/butane as propellant

Hazardous components

CAS No	Components	Quantity
64742-49-0	hydrocarbons, C7, n-alkanes, isoalkanes, cyclics	50.008655 %

4. First-aid measures**Description of first aid measures****General information**

Remove affected person from the danger area and lay down.
Take off immediately all contaminated clothing and wash it before reuse.
Put victim at rest, cover with a blanket and keep warm.
Do not leave affected person unattended.
If a person vomits when lying on his back, place him in the recovery position.
If breathing is irregular or stopped, administer artificial respiration.
If unconscious place in recovery position and seek medical advice.

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Never give anything by mouth to an unconscious person or a person with cramps.
In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Self-protection of the first aider:
Wear personal protection equipment (refer to section 8).
First Aid.

Notes for the doctor:
No special measures are necessary.

After inhalation

Remove victim out of the danger area.
Provide fresh air.
In the case of lung irritation: Primary treatment using corticoide spray, eg. Auxiloson spray, Pulmicort-dosage-spray. (Auxiloson and Pulmicort are registered trademarks). Call a physician immediately.
Consult a doctor immediately in the case of inhaling spray mist and show him packing or label.

After contact with skin

Wash immediately with:
Water and soap
Rub greasy ointment into the skin.
Do not wash with:
Solvents/Thinner
In case of skin irritation, consult a physician.

After contact with eyes

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

After ingestion

Do NOT induce vomiting.
Give nothing to eat or drink.
Never give anything by mouth to an unconscious person or a person with cramps.
Call a physician immediately.

Most important symptoms and effects, both acute and delayed

The following symptoms may occur:
Cough
Dyspnoea
Cyanosis (blue coloured blood)
Acidosis
Central nervous system depression
Headache
Nausea
Drowsiness
Dizziness
Inebriation
Unconsciousness

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.
Regulation of the blood circulation, possible shock treatment.
Where appropriate artificial ventilation.

5. Fire-fighting measures**Extinguishing media****Suitable extinguishing media**

Water mist
Extinguishing powder (ABC-powder)
Foam
Carbon dioxide (CO₂)

Fire class (DIN EN 2): B (Fires of liquids or liquid turning substances).

Unsuitable extinguishing media

Full water jet
Water spray jet

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Specific hazards arising from the chemical

In principle, fire gasses of organic materials have to be classified as toxic to the respiratory system.
Burning produces heavy smoke.

Hazardous combustion products:

Carbon monoxide.
carbon dioxide (CO₂)
Hydrocarbons
Pyrolysis products, toxic

Special protective equipment and precautions for fire-fighters

Usual measures of preventive and averting fire protection.
Co-ordinate fire-fighting measures to the fire surroundings.
Do not inhale explosion and combustion gases.
Move to fresh air in case of accidental inhalation of fumes from overheating or combustion.
Beware of reignition.
Use caution when applying carbon dioxide in confined spaces. Carbon dioxide can displace oxygen.
Move undamaged containers from immediate hazard area if it can be done safely.
Use water spray jet to protect personnel and to cool endangered containers.
Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

Special protective equipment for firefighters:

Wear a self-contained breathing apparatus and chemical protective clothing.
DIN-/EN-Norms: EN 469
Firefighting protective clothing.

6. Accidental release measures**Personal precautions, protective equipment and emergency procedures**

Avoid contact with skin, eyes and clothes.
Do not breathe vapour/aerosol.
Remove all sources of ignition.
Remove persons to safety.
Be aware that gases can spread at ground level (heavier than air) and pay attention to the wind direction.
Provide adequate ventilation.

For non-emergency personnel:

Use personal protection equipment.
Walk out of the danger zone and notify trained personnel.
Emergency procedures:
Keep the factory emergency plan and the information chain.

For emergency responders:

Use personal protection equipment.
The personal protective equipment must be adapted to the situation.
Suitable material:
See under section 8.2 - Personal protection equipment.

Environmental precautions

Do not allow to enter into surface water or drains.
Do not allow to enter into soil/subsoil.
Ensure waste is collected and contained.
Suppress gases/vapours/mists with water spray jet.
In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Methods and material for containment and cleaning up

For containment:
Prevent spread over a wide area (e.g. by containment or oil barriers).
Remove from the water surface (e.g. skimming, sucking).
Cover drains.

For cleaning up:

Clean-up methods - large spillage:
Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
Shovel into suitable container for disposal.
Local authorities should be advised if significant spillages cannot be contained.

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Clean-up methods - small spillage:
Clear spills immediately.
Wipe up with absorbent material (eg. cloth, fleece).
Collect in closed and suitable containers for disposal.
Clear contaminated areas thoroughly.
Recommended cleansing agent:
Clean with detergents. Avoid solvent cleaners.
Retain contaminated washing water and dispose it.
Ensure all waste water is collected and treated via a waste water treatment plant.
Ventilate affected area.

Suitable material for taking up:
Sand
Kieselguhr
Universal binder
Absorbing material, organic

Unsuitable material for taking up:
None known

Reference to other sections

Personal protection equipment: see section 8
Disposal: see section 13

7. Handling and storage**Precautions for safe handling****Advice on safe handling**

Measures to prevent aerosol and dust generation:
It is recommended to design all work processes always so that the following is excluded:
Inhalation of vapours or spray/mists
Eye contact
Skin contact

Technical ventilation of workplace
Vapours are heavier than air.
Provide room air exhaust at ground level.
During filling, metering and sampling should be used if possible:
Splashproof grounded devices
Devices with local exhaust
Use only in a exhaust booth with integrated air filter.
Use in ventilated spray booths only.
Ensure that fresh air is supplied to the breathing zone of the operator and exhaust air is removed in his back!
Re-circulation of exhaust air is not recommended.

Advice on protection against fire and explosion

Measures to prevent fire:
The product is: Extremely flammable.
Vapours can form explosive mixtures with air.
Reignition possible over considerable distance.
Vapours are heavier than air, spread along floors and form explosive mixtures with air.
Due to danger of explosion, prevent leakage of vapours into cellars, flues and ditches.
Use explosion-proof machinery, apparatus, ventilation facilities, tools etc.
Use only non-sparking tools.
Flammable vapours can accumulate in head space of closed systems.
Only use the material in places where open light, fire and other flammable sources can be kept away.
Keep away from sources of heat (e.g. hot surfaces), sparks and open flames.
Usual measures for fire prevention.
Fire-fighting equipment on the basis of class B.
Wear anti-static footwear and clothing

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

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pressure of explosions, suppression of explosions, etc.).

Further information on handling

Environmental precautions:

Shafts and sewers must be protected from entry of the product.

Transfer wash-downs in sealed containers.

For restriction of emission on volatile organic compounds (VOC) the solvent vapours should be supplied to exhaust air purification facilities (filter, gas washer, incineration).

Advices on general occupational hygiene:

Wear personal protection equipment (refer to section 8).

Minimum standard for preventive measures while handling with working materials are specified in the TRGS 500.

General industrial hygiene practice.

Handle in accordance with good industrial hygiene and safety practice.

Working places should be designed to allow cleaning at any time.

Floors, walls and other surfaces in the hazard area must be cleaned regularly.

Clean spray booth and exhaust hood completely with every product change.

When using do not eat, drink, smoke, sniff.

Thorough skin-cleansing after handling the product.

Used working clothes should not be worn outside the work area.

Conditions for safe storage, including any incompatibilities**Requirements for storage rooms and vessels**

Suitable floor material:

Floors should be impervious, resistant to liquids and easy to clean.

Protect against:

Heat

Cold

Recommended storage temperature: +10 ... +30 °C

Keep away from:

Food and feedingstuffs

Packaging materials:

Suitable container/equipment material:

Keep/Store only in original container.

Unsuitable container/equipment material:

See under section 8.2 - Hand protection.

Advice on storage compatibility

Do not store together with:

Storage class:

1 (Explosive hazardous substances)

4.1 A (Other potentially explosive hazardous substances)

4.1 B (Flammable solids)

4.2 (Pyrophoric or self-heating substances)

4.3 (Hazardous substances that release flammable gases when in contact with water)

5.1 A (Highly oxidising substances)

5.1 B (Oxidising substances)

5.1 C (Ammonium nitrate and preparations containing ammonium nitrate)

5.2 (Organic peroxides and self-reactive substances)

6.2 (Infectious substances)

7 (Radioactive substances)

Further information on storage conditions

Technical measures and storage conditions:

The valid water and zoning ordinances must be observed.

Heating causes rise in pressure with risk of bursting.

Keep away from sources of ignition. - No smoking.

Keep in a cool, well-ventilated place.

Keep container tightly closed.

Protect containers against damage.

Ensure adequate ventilation of the storage area.

Store small packages in a suitable, robust cabinet.

Do not store outside.

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See also instructions on the label.

8. Exposure controls/personal protection**Control parameters****Exposure limits**

CAS No.	Substance	ppm	mg/m ³	f/cc	Category	Origin
142-82-5	Heptane (n-Heptane)	500	2000		TWA (8 h)	PEL
68476-85-7	L.P.G. (Liquified petroleum gas)	1000	1800		TWA (8 h)	PEL
68476-85-7	L.P.G.	1000	1800		TWA (8 h)	REL
	- Particulates not Otherwise regulated (PNOR) Respirable fraction	529.5 mp/m ³	5		TWA (8 h)	PEL
	- Particulates not Otherwise regulated (PNOR) Total dust	1765 mp/m ³	15		TWA (8 h)	PEL
142-82-5	n-Heptane	85	350		TWA (8 h)	REL
		C 440	C 1800		Ceiling	REL

Additional advice on limit values

National Institute for Occupational Safety and Health - NIOSH (<http://cdc.gov/niosh/pel88/pelstart.html>) / Occupational Safety and Health Administration - Department of Labour (http://osha.gov/pls/oshaweb/owasrch.search_form?p_doc_type=SATNDARSp_toc_level=0)
Source of law:

Recommended monitoring procedures:

Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents (BS EN 14042):

Room air monitoring

Test tube

Preliminary concentration measurements:

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

DRÄGER test tubes - Short-term tubes - Petroleum hydrocarbons 10 / a (n-octane, measuring range : 10 - 300 ppm, response time : 60 sec) (<http://www.gasmesstechnik.de>)

DRÄGER test tubes - Short-term tubes - Petroleum hydrocarbons 100 / a (n-octane, measuring range : 100 - 2500 ppm, response time : 30 sec) (<http://www.gasmesstechnik.de>)

Preventive industrial medical examinations are to be offered.

See under section 15.1 - National regulations.

Exposure limits at intended use:

DNEL-/PNEC-values:

There are no exposure scenarios attached in the Appendix of this Safety Data Sheet.

Risk management measures according to used control banding approach:

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)

Used model:

Consider appropriate model solutions according to good engineering practices while designing the work process if available.

Exposure controls



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Appropriate engineering controls

Substance/mixture related measures to prevent exposure during identified uses:

Technical measures to prevent exposure:

Design of appropriate work processes and engineering controls and the use of adequate materials (model solutions as certified working methods, working appliance according to the state of the art, models of working times).

Organisational measures to prevent exposure:

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).

Structural measures to prevent exposure:

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

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn. Technical measures and the application of suitable work processes have priority over personal protection equipment.

References for design of technical equipment:

See under section 7.1 - Precautions for safe handling.

Summary of the risk management measures for exposure scenario:

Use only the following product amount per time unit:

No information available.

Minimum room-width and room-height for handling/application:

No information available.

Minimum room ventilation rate for handling/application (air changes per hour):

No information available.

Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection:

Eye glasses with side protection ()

Recommended eye protection articles:

UVEX I-VO / UVEX I-3 / UVEX SUPER OTG

Or comparable articles from other companies.

Hand protection

Skin protection:

Preventive skin protection.:

Draw up skin protection programme.

Before starting work, apply solvent-resistant skincare preparations.

e.g. sansibal® / sansibon®, dualin® (PETER GREVEN PHYSIODERM)

Wash hands before breaks and after work.

e.g. ecosan®, topscrub® soft / topscrub® extra / topscrub® nature (PETER GREVEN PHYSIODERM)

After cleaning apply high-fat content skin care cream.

e.g. physioderm® creme, cura soft® / cUrea soft (PETER GREVEN PHYSIODERM)

Apply skin care products after work.

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Decrease wearing protection gloves to an inevitable degree to avoid skin rash.

Technical and organizational protective actions have to be preferred.

Breakthrough times and swelling properties of the material must be taken into consideration.

Check leak tightness/impermeability prior to use.

Wear cotton undermitten if possible.

Change preventive gloves once by hour or use special skin-protective preparations for protective gloves carrier,

e.g. physioderm® proGlove (PETER GREVEN PHYSIODERM)

Take recovery periods for skin regeneration.

Do not wear gloves near rotary machines and tools.

Dispose preventive gloves after defect or expiry of wearing time. Replace when worn.

In the case of wanting to use the gloves again, clean them before taking off and air them well.

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Wearing time with permanent contact:

Suitable gloves type:

Gloves with long cuffs

Recommended glove articles:

Suitable materials at long term, direct contact (Recommended: Preventive index 6, accordingly > 480 min. permeation time):

Nitrile rubber / NBR (KCL-CAMATRIL VELOURS® - Art. No. 730) - Layer thickness : 0,4 mm

Fluorine rubber / FKM / Viton (KCL-VITOJECT® - Art. No. 890) - Layer thickness : 0,7 mm

Or comparable articles from other companies.

Unsuitable material:

Butyl caoutchouc (butyl rubber)

NR (natural rubber, natural latex)

Wearing time with occasional contact (splashes):

Suitable gloves type:

Disposable gloves

Recommended glove articles:

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

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

Or comparable articles from other companies.

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/halves at about 1,5 times larger/lower layer thickness.

Declared permeation times 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.

Barrier creams are not substitutes for body protection.

Skin protection

Suitable protective clothing:

Overall, Natural fibres (e.g. cotton) ()

For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes).

When handling with chemical substances, protective clothing with CE-labels including the four control digits must be worn.

DIN-/EN-Norms: DIN EN 468

Chemical protection clothing (Disposable suit antistatic)

Type 6 limited splash-tight

Type 5 Particle-tight (method B)

Type 4 Spray-tight

Recommended protective clothing articles:

TYVEK CLASSIC PLUS (DU PONT)

Or comparable articles from other companies.

Chemical resistant safety shoes with conductible sole ()

Wash contaminated clothing prior to re-use.

Used working clothes should not be worn outside the work area.

Street clothing should be stored separately from work clothing.

Thermal hazards:

No thermal hazards during use of this product.

Respiratory protection

Respiratory protection necessary at:

exceeding exposure limit values

aerosol or mist formation

high concentrations

prolonged exposure

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insufficient ventilation
insufficient exhaust

Use only respiratory protection equipment with CE-symbol including four digit test number.

Filter types:A, B, E, K. Class 1: Maximum permitted contaminant concentration in inhaled air = 1000 mL/m³ (0.1 % by vol.); class 2: maximum permitted contaminant concentration in inhaled air = 5000 mL/m³ (0.5 % by vol.); class 3: maximum permitted contaminant concentration in inhaled air = 10000 mL/m³ (1.0 % by vol.)

The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

Observe the wear time limits according GefStoffV in combination with the rules for using respiratory protection apparatus (BGR 190).

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.

Suitable respiratory protection apparatus:

Half-face mask or quarter facepiece: maximum use concentration for substances with exposure limits: P1 filter: up to a max. of 4 times the exposure limit. P2 filter: up to a max. of 10 times the exposure limit. P3 filter: up to a max. of 30 times the expo

Recommended respiratory protection articles:

Half mask or quarter mask with combination filter A1P1/A2P2 for gases, vapors and particles. (EN 140, EN 14387)

Filtering half mask or quarter mask with combination filter FFA1 P1/FFA2P2 for gases, vapors and particles. (EN 405)

Gas filtering Half-face mask FFA (EN 405)

Model 4251 (FFA1P1 - 1000 ml/m³) / 4255 (FFA2P2SL - 5000 ml/m³) (3M)

Half-face mask or Quarter-face mask with gas filter (EN 140, EN 14387)

Filter type 6051 (A1 - 1000 ml/m³) / 6055 (A2 - 5000 ml/m³) (3M)

Full-face mask with gas filter (EN 136, EN 14387)

Gas filter type: A, Indication colour: brown

Or comparable articles from other companies.

Environmental exposure controls

Environmental exposure controls:

Technical measures to prevent exposure:

Discharge exhaust air only with suitable separators to atmosphere.

Organisational measures to prevent exposure:

Should not be released into the environment.

Structural measures to prevent exposure:

Use the following recovery and/or abatement technique for cleaning waste gases:

Exhaust air scrubber

Adsorption

Incineration

Further information see under section 6.2 - Environmental precautions.

9. Physical and chemical properties**Information on basic physical and chemical properties**

Physical state: aerosol
Color: white
Odor: characteristic

Test method

pH-Value: not applicable

Changes in the physical state

Melting point/freezing point: not determined
Initial boiling point and boiling range: > -42 °C literature value
Sublimation point: not applicable
Softening point: not applicable
Pour point: not applicable
Flash point: < -97 °C literature value

Flammability

Solid: not applicable (Aerosol)

Gas: not applicable (Aerosol)

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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: 0,7 vol. % literature value
Upper explosion limits: 7 vol. % literature value
Ignition temperature: > 200 °C literature value

Auto-ignition temperature

Solid: Not pyrophoric.

Gas: Not pyrophoric.

Decomposition temperature: not determined

Oxidizing properties

not relevant

Vapor pressure: < 3000 hPa literature value
(at 20 °C)Vapor pressure: < 7000 hPa literature value
(at 50 °C)Density (at 20 °C): (5,383 lbs/gal) 0,645 g/cm³ calculated.

Bulk density: not applicable (Aerosol)

Water solubility: insoluble: < 0,1 g/L literature value
(at 20 °C)**Solubility in other solvents**

miscible with most organic solvents

Partition coefficient: not applicable (Mixtures)

Viscosity / dynamic: not applicable

Viscosity / kinematic: not applicable
(at 40 °C)

Flow time: not applicable

Vapour density: ~ 2.0 (Air=1) literature value
(at 25 °C)

Evaporation rate: not determined

Solvent separation test: not applicable

Other information

Solid content: not determined

Temperature class (DIN EN 60079-0): T 3 (T > +200 °C ... <= +300 °C)

Limiting oxygen concentration (LOC) (DIN EN 14756): No data available

Explosion group: IIA

Maximum experimental safe gap (MESG) (IEC 60079-1-1): > 0,9 mm

Minimum ignition current (MIC) (IEC 60079-11): No data available

Minimum ignition energy (MIE) (DIN EN 13673-1): No data available

Odour threshold: 500 ppm ((butane), literature value)

Molecular weight: No data available

Data apply to the main component.

Conductivity (ASTM D 2624): No data available

Surface tension: No data available

Fat solubility (g/L): No data available

Calculated oxidation potential of the mixture (OP): not relevant

The product is a foam aerosol.

specific heat of combustion (Delta Hc(i)) in kJ/g: >= 30 kJ/g

Solvent content (%): 51 %

Propellant content (%): 48 %

Substance group relevant properties:

Explosives

not applicable:

In use, may form flammable/explosive vapour-air mixture.:

Flammable gases

not applicable (Aerosol)

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In use, may form flammable/explosive vapour-air mixture.

Flammable aerosols
Extremely flammable aerosol.
In use, may form flammable/explosive vapour-air mixture.

Oxidising gases
Not oxidising.

Gases under pressure
not applicable (Aerosol)

Flammable liquids
not applicable (Aerosol)

Flammable solids
not applicable (Aerosol)

Self-reactive substances and mixtures
not applicable

Pyrophoric liquids
Not pyrophoric.

Pyrophoric solids
Not pyrophoric.

self-heating substances and mixtures
not applicable

Substances and mixtures which, in contact with water, emit flammable gases
not applicable

Oxidising liquids
Not oxidising.

Oxidising gases
Not oxidising.

Organic peroxides
not applicable

Corrosive to metals.
Not corrosive to metals.

10. Stability and reactivity**Reactivity**

The product is chemically stable under recommended conditions of storage, use and temperature.

Chemical stability

Stability: Stable

The product is chemically stable under recommended conditions of storage, use and temperature.

Possibility of hazardous reactions

Hazardous reactions: Will not occur

No hazardous reaction when handled and stored according to provisions.

Conditions to avoid

Heat, flames and sparks.

Further information see under section 7.2 - Conditions for safe storage, including any incompatibilities.

Further information see under section 10.5 - Incompatible materials.

Incompatible materials

Violent reaction with:

Oxidising agent, strong

Further information see under section 7.1 - Precautions for safe handling.

Hazardous decomposition products

Does not decompose when used for intended uses.

No known hazardous decomposition products.

Under fire conditions: See under section 5.2 - Special hazards arising from the substance or mixture.

11. Toxicological information**Information on toxicological effects****Route(s) of Entry**

Inhalation : X

Skin : X

Ingestion : X

Toxicokinetics, metabolism and distribution

There are no data available on the preparation/mixture itself.

The product has not been tested.

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Information on likely routes of exposure /

Symptoms related to the physical, chemical and toxicological characteristics:

See under section 4.2 - Most important symptoms and effects, both acute and delayed.

Exposure route:

In case of ingestion:

The product does have a sealed spraying device.

In case of skin contact:

Irritant.

Prolonged or repeated skin contact may cause removal of natural fat from the skin resulting in dermatitis (skin inflammation).

Rapid evaporation of the liquid may cause frostbite.

In case of inhalation:

slightly irritant but not relevant for classification.

Narcotic effects

In case of eye contact:

slightly irritant but not relevant for classification.

Conjunctival redness.

Delayed and immediate effects as well as chronic effects from short and long-term exposure:

Not relevant

Interactive effects:

Not relevant

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.

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

Acute toxicity

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

CAS No	Components				
	Exposure routes	Method	Dose	Species	Source
64742-49-0	hydrocarbons, C7, n-alkanes, isoalkanes, cyclics				
	oral	LD50	> 5840 mg/kg	Rat	ECHA [read-across]
	dermal	LD50	> 2800 mg/kg	Rat	ECHA [read-across]
	inhalative (4 h) vapour	LC50	> 23,3 mg/l	Rat	ECHA [read-across]

Irritation and corrosivity

Causes skin irritation

Sensitizing effects

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

Specific target organ toxicity (STOT) - single exposure

May cause drowsiness or dizziness (hydrocarbons, C7, n-alkanes, isoalkanes, cyclics)

Severe effects after repeated or prolonged exposure

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.

Carcinogenicity (NTP): None of the ingredients is listed.

Carcinogenicity (IARC): Petroleum solvents is listed in group 3.

Carcinogenicity (OSHA): None of the ingredients is listed.

Aspiration hazard

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

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12. Ecological information**Ecotoxicity**

Aquatic toxicity:

Acute (short-term) fish toxicity:

There are no data available on the preparation/mixture itself. The product has not been tested.

Acute (short-term) toxicity to crustacea:

There are no data available on the preparation/mixture itself. The product has not been tested.

Acute (short-term) toxicity to aquatic algae and cyanobacteria:

There are no data available on the preparation/mixture itself. The product has not been tested.

Chronic (long-term) toxicity to crustacea:

There are no data available on the preparation/mixture itself. The product has not been tested.

Chronic (long-term) fish toxicity:

There are no data available on the preparation/mixture itself. The product has not been tested.

Toxicity to other aquatic plants/organisms:

No data available (Substances/ingredient)

Terrestrial toxicity:

Acute and subchronic bird toxicity:

No data available (Substances/ingredient)

Bird reproduction toxicity:

No data available (Substances/ingredient)

Acute earthworm toxicity:

No data available (Substances/ingredient)

Chronic earthworm toxicity (reproduction):

No data available (Substances/ingredient)

Useful insect toxicity:

No data available (Substances/ingredient)

Acute plant toxicity:

No data available (Substances/ingredient)

Chronic plant toxicity:

No data available (Substances/ingredient)

Toxicity to soil macroorganisms except of arthropods:

No data available (Substances/ingredient)

Effects on soil microorganisms:

No data available (Substances/ingredient)

Behaviour in waste water treatment plants:

Due to its low solubility in water the product is almost completely mechanically separated in biological sewage plants.

Persistence and degradability

Abiotic degradation:

Physicochemical elimination:

Oxidation:

not applicable (Mixtures)

Hydrolysis:

not applicable (Mixtures)

Photochemical elimination:

photolysis:

not applicable (Mixtures)

Ozonolysis:

not applicable (Mixtures)

Biodegradation:

not applicable (Mixtures)

Bioaccumulative potential

not applicable (Mixtures)

Mobility in soil

Surface tension:

See under section 9.1 - Information on basic physical and chemical properties.

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Water-air (volatility rate, Henry-constant):

not applicable (Mixtures)

Product is easily volatile.

The information about ecology refers to the main components.

Soil-Water (Adsorption coefficient):

not applicable (Mixtures)

Soil-Air (volatility rate):

not applicable (Mixtures)

Product is easily volatile.

The information about ecology refers to the main components.

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.

Other adverse effects

Ozone depletion potential (ODP):

No data available (Substances/ingredient)

Photochemical ozone creation potential (POCP):

No data available (Substances/ingredient)

Global warming potential (GWP):

No data available (Substances/ingredient)

Endocrine disrupting potential:

No data available

AOX: Product does not contain any organic halogens.

13. Disposal considerations**Waste treatment methods****Advice on disposal**

Waste treatment options:

Send to a hazardous waste incinerator facility under observation of official regulations.

Dispose of waste according to applicable legislation.

Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

Properties of waste which render it hazardous:

Irritant.

Evidence for disposal must be provided.

Consult the appropriate local waste disposal expert about waste disposal.

Waste for recycling is to be classified and labelled.

For recycling, contact recycling exchanges.

May not be disposed or deposited together with domestic garbage.

Do not mix with other wastes.

Do not flush into surface water or sanitary sewer system.

Do not dispose of waste into sewer.

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.

Clean IBCs or drums at approved facility only.

The waste producer is responsible for correct coding and designation of his wastes.

The allocation of waste identity numbers/waste descriptions must be carried out according to the EEC, specific to the industry and process.

List of proposed waste codes/waste designations in accordance with EWC:

RCRA Hazardous wastes (Resource Conservation and Recovery Act)

D001 Ignitability

Contaminated packaging

Other disposal recommendations:

none

Handle contaminated packages in the same way as the substance itself.

Dispose of contents/container to in accordance with local regulations.

14. Transport information

US DOT 49 CFR 172.101

UN/ID number:

UN1950

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Proper shipping name: AEROSOLS
Transport hazard class(es): 2.1
Hazard label: 2.1

Marine transport (IMDG)

UN number: UN1950
UN proper shipping name: AEROSOLS (Naphtha (Petroleum), hydrotreated, light)
Transport hazard class(es): 2.1
Packing group: -
Hazard label: 2.1



Marine pollutant: P
Limited quantity: 1000 mL
EmS: F-D, S-U

Other applicable information
Excepted quantity: E0
Exception(s): Not applicable

Marking: UN 1950 AEROSOLS, [LIMITED QUANTITIES: --- (Amdt. 37-14)]

Air transport (ICAO)

UN number: UN1950
UN proper shipping name: AEROSOLS, FLAMMABLE
Transport hazard class(es): 2.1
Packing group: -
Hazard label: 2.1



Limited quantity Passenger: 30 kg G
IATA-packing instructions - Passenger: 203
IATA-max. quantity - Passenger: 75 kg
IATA-packing instructions - Cargo: 203
IATA-max. quantity - Cargo: 150 kg

Other applicable information
Excepted quantity: E0
Passenger-LQ: Y203
ERG Kodex: 3L

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 2.7 of the valid ICAO/IATA Dangerous Goods Regulations have to be observed.

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 Administration have to be observed. Airmail: prohibited.

Environmental hazards

ENVIRONMENTALLY HAZARDOUS: yes



Danger releasing substance: Naphtha (Petroleum), hydrotreated, light

Special precautions for user

Further information see under section 6, 7, 8.

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

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

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Other applicable information

Postal, express and courier services:

Postal service (national):

Refer to your National Postal Administration.

Express freight / special delivery:

Refer to your National Postal Administration.

Courier service (national):

The general conditions of business of the particular courier service have to be observed.

15. Regulatory information**U.S. Regulations****National Inventory TSCA**

All intentional used ingredients of this product are listed in the TSCA-inventory or correspond to TSCA-exceptions on polymers according to 40 CFR 723.

National regulatory information

SARA Section 311/312 Hazards:

hydrocarbons, C7, n-alkanes, isoalkanes, cyclics (64742-49-0): Fire hazard, Immediate (acute) health hazard

Butane (106-97-8): Fire hazard

Propane (74-98-6): Fire hazard

Clean Air Act Section 112(r):

Butane (106-97-8): Threshold quantities = 10,000 lbs.

Propane (74-98-6): Threshold quantities = 10,000 lbs.

State Regulations**Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65, State of California)**

This product contains no chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

Additional information

Delaware - Air Quantity Management List: No data available

Idaho - Air Pollutants List: No data available

Maine - Hazardous Air Pollutants List: No data available

Massachusetts - Hazardous Substances: No data available

Michigan - Critical Materials: No data available

Minnesota - Hazardous Substances: No data available

New Jersey - Right-to-Know (RTK) Hazardous Substances, TCPA EHS List: No data available

New York - List of Hazardous Substances: No data available

Pennsylvania - Hazardous Substances: No data available

Washington - Permissible Exposure Limits for Air Contaminants: No data available

West Virginia - Toxic Air Pollutant List: No data available

Additional information

Other regulations, restrictions and prohibition regulations:

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

16. Other information**Hazardous Materials Information Label (HMIS)**

Health:	1
Flammability:	4
Physical Hazard:	0
Personal Protection:	I

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NFPA Hazard Ratings

Health:	1
Flammability:	4
Reactivity:	0
Unique Hazard:	---
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Revision No:	1,00

**Changes**

This version replaces all former issues.

Changes made in this revision see section: 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16.

Abbreviations and acronyms

CAS: Chemical Abstracts Service.
DNEL: Derived No-Effect Level.
EC50: Effective concentration, 50 percent.
EINECS: European Inventory of Existing Commercial Chemical Substances.
ELINCS: European List of Notified Chemical Substances.
GHS: Globally Harmonized System of Classification and Labelling of Chemicals.
IATA: International Air Transport Association.
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 Civil Aviation Organization Technical Instruction.
IMDG-Code: International Maritime Dangerous Goods Code.
ISO: A standard of International Standards Organisation.
IUCLID: International Uniform Chemical Information Database.
LC50: Lethal concentration, 50 percent.
LD50: Lethal Dose, 50 percent.
log Kow (Pow): octanol-water partition coefficient.
LQ: Limited Quantities.
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.
UN: United Nations.
vPvB: Very persistent and very bioaccumulable.

Other data

Training references:

Yearly briefing and instruction of employees by means of of operation 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 (<http://www.acmos.com>).

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:

Hazard Communication Standard (HCS 2012) according to 29 CFR 1910.1200 in the valid version in each case
National Institute for Occupational Safety and Health - NIOSH (<http://cdc.gov/niosh/pel88/pelstart.html>) / Occupational Safety and Health Administration - Department of Labour (http://osha.gov/pls/oshaweb/owasrch.search_form?p_doc_type=SATNDARSp_toc_level=0)
Code of Federal Regulations - CFR / Transport regulations according to 49 CFR in the valid version in each case - Department of Transportation - DOT (<http://www.access.gpo.gov/nara/cfr/cfr-table-search.html>)
European Chemical Substances Information System - ESIS (<http://esis.jrc.ec.europa.eu>)
MERCK Chemical Databases - MERCK Chemicals (<http://www.merck-chemicals.com>)

Further information and practical guides on the internet:

The access to European Union law - EUR-Lex (<http://eur-lex.europa.eu>)
Environmental Protection Agency - EPA (<http://www.epa.gov>) / ECOTOX-Database (<http://cfpub.epa.gov/ecotox>)



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