

Printing date 01.03.2016

Version number 104

Revision: 18.05.2015

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

- 1.1 Product identifier
- Trade name: Brake Cleaner without Acetone Fluid
- Article number: 82649
- 1.2 Relevant identified uses of the substance or mixture and uses advised against No further relevant information available.
- Application of the substance / the mixture Cleaning agent / Cleaner Solvents

- 1.3 Details of the supplier of the safety data sheet - Manufacturer/Supplier: plus6 Werkzeuge & Co. KG Gewerbepark 9 DE - 06917 Jessen Tel.: +49 (0) 3877/95747-60 Fax: +49 (0) 3877/95747-62

E-mail: info@plus6.de - **1.4 Emergency telephone number:** *Poison emergency call Berlin +49 (0) 30/30686 700*

SECTION 2: Hazards identification

-2.1 Classification of the substance or mixture

 Classification acco 	lassification according to Regulation (EC) No 1272/2008		
Flam. Liq. 2	H225	Highly flammable liquid and vapour.	
Skin Irrit. 2	H315	Causes skin irritation.	
Eye Irrit. 2	H319	Causes serious eye irritation.	
STOT SE 3	H336	May cause drowsiness or dizziness.	
Asp. Tox. 1	H304	May be fatal if swallowed and enters airways.	
Aquatia Chronia 2	U/11	Toria to aquatia life with long lasting affects	

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.

- 2.2 Label elements

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

The product is classified and labelled according to the CLP regulation.

- Hazard pictograms



GHS02 GHS07 GHS08 GHS09

- Signal word Danger
- *Hazard-determining components of labelling:* naphtha (petroleum). hydrotreated, light
- Hazard statements

H225 Highly flammable liquid and vapour.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H304 May be fatal if swallowed and enters airways.

H411 Toxic to aquatic life with long lasting effects.

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- Precautionary statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P271 Use only outdoors or in a well-ventilated area. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Do NOT induce vomiting. *P331* P370+P378 In case of fire: Use for extinction: CO2, powder or water spray. Store locked up. P405 P403+P235 Store in a well-ventilated place. Keep cool. Dispose of contents/container in accordance with local/regional/national/international regulations. P501 -2.3 Other hazards - Results of PBT and vPvB assessment - PBT: Not applicable.

- vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- 3.2 Mixtures

- Description: Solvent mixture.

- Dangerous components:

-Dangerous components.		
CAS: 64742-49-0	naphtha (petroleum). hydrotreated, light	50-100%
921-024-6	Flam. Liq. 2, H225; Asp. Tox. 1, H304; Aquatic Chronic 2, H411; Skin Irrit.	
Reg.nr.: 01-2119475514-35	2, H315; STOT SE 3, Ĥ336	
CAS: 67-63-0	propan-2-ol	2.5-10%
EINECS: 200-661-7	Flam. Liq. 2, H225; Eye Irrit. 2, H319; STOT SE 3, H336	
Reg.nr.: 01-2119457558-25		

- Additional information

For the wording of the listed hazard phrases refer to section 16.

The product contains a mixture of hydrocarbons (n-, iso- and cyclic aliphatics, predominantly in the range of C7-C8). Total aromatics < 0,01 M-% n-Hexane < 5 M-%. Benzene < 0,01 M-%.

Considered not to be PBT and vPvB according to Regulation (EC) No 1907/2006 (REACH)

- Composition/Ingredients

Constituents according to EC-Regulation 648/2004:

> 30 % aliphatic hydrocarbons

SECTION 4: First aid measures

-4.1 Description of first aid measures

- General advice: Instantly remove any clothing soiled by the product.
- After inhalation Supply fresh air; consult doctor in case of symptoms.
- -After skin contact

Remove contaminated clothing immediately. Wash affected areas with plenty of water und soap. If irritation continues, contact a doctor.

- After eye contact Rinse immediately opened eye for several minutes under running water. Then consult doctor.
- -After swallowing
- Do not induce vomiting; instantly call for medical help.

Administer medicinal carbon

- 4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

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- **4.3 Indication of any immediate medical attention and special treatment needed** No further relevant information available.

SECTION 5: Firefighting measures

- 5.1 Extinguishing media
- Suitable extinguishing agents
- CO2, extinguishing powder or water jet. Fight larger fires with water jet or alcohol-resistant foam.
- For safety reasons unsuitable extinguishing agents Water with a full water jet.
- 5.2 Special hazards arising from the substance or mixture

Can form explosive gas-air mixtures. In case of incomplete combustion carbon monoxide can arise. Fumes are heavier than air and distributed over ground. Inflammation is possible from a far distance.

- 5.3 Advice for firefighters
- Protective equipment:
- See section 8.

Wear full protective suit with self-contained breathing apparatus.

-Additional information

Endangered containers in the surrounding area should be cooled with a water-hose.

If possible, remove product off fire area (danger of bursting).

Collect contaminated fire fighting water separately. It must not enter drains.

SECTION 6: Accidental release measures

- 6.1 Personal precautions, protective equipment and emergency procedures Wear protective equipment and keep unprotected persons away.
- 6.2 Environmental precautions: Do not allow product to reach sewage system or water bodies.

Prevent material from reaching sewage system, holes and cellars. Inform respective authorities in case product reaches water or sewage system.

- 6.3 Methods and material for containment and cleaning up: Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust). Dispose of contaminated material as waste according to item 13.
- Ensure adequate ventilation. - **6.4 Reference to other sections**
- See Section 7 for information on safe handling See Section 8 for information on personal protection equipment. See Section 13 for information on disposal.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling Keep containers tightly sealed.
Ensure good ventilation/exhaustion at the workplace. Avoid repeated or long-term skin contact. Prevent formation of aerosols.
- Information about protection against explosions and fires: Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- 7.2 Conditions for safe storage, including any incompatibilities
- Storage Protect against direct sunlight, other sources of heat and ignition.
Store in cool, dry conditions in well sealed containers.



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- Requirements to be met by storerooms and containers: Observe official regulations on storage and handling of water harzardous substances Suitable material for containers and pipes: Iron-containing alloys.

- Information about storage in one common storage facility:
- Pay attention to regulations / technical guidelines on mixed storage of flammable liquids.

- Further information about storage conditions:

- Pay attention to regulations/technical rules for the storage of combustible liquids.
- Storage class 3 (VCI Konzept, 2007)

-7.3 Specific end use(s) No further relevant information available.

SECTION 8: Exposure controls/personal protection

- Additional information about design of technical systems: Room ventilation i.e. vacuum suction. Measures to be taken against electro-static sparks.

-8.1 Control parameters

- Components with critical values that require monitoring at the workplace: 64742-49-0 naphtha (petroleum). hydrotreated, light (50-100%) OEL Long-term value: 1000 mg/m³, 250 ppm RCP (aliphatic dearomat. solvents) 67-63-0 propan-2-ol (2.5-10%) WEL Short-term value: 1250 mg/m³, 500 ppm Long-term value: 999 mg/m³, 400 ppm - DNELs 64742-49-0 naphtha (petroleum). hydrotreated, light Oral DNEL (population) 699 mg/kg bw/day (Long-term - systemic effects) DNEL (population) 699 mg/kg bw/day (Long-term - systemic effects) Dermal DNEL (worker) 773 mg/kg bw/day (Long-term - systemic effects) Inhalative DNEL (population) 608 mg/m³ (Long-term - systemic effects) DNEL (worker) 2035 mg/m³ (Long-term - systemic effects) 67-63-0 propan-2-ol Oral DNEL (population) 26 mg/kg bw/day (Long-term - systemic effects) Dermal DNEL (population) 319 mg/kg bw/day (Long-term - systemic effects) DNEL (worker) 888 mg/kg bw/day (Long-term - systemic effects) Inhalative DNEL (population) 89 mg/m³ (Long-term - systemic effects) DNEL (worker) 500 mg/m³ (Long-term - systemic effects) - PNECs 67-63-0 propan-2-ol PNEC 2251 mg/l (sewage treatment plant) PNEC aqua 140.9 mg/l (fresh water) 140.9 mg/l (marine water) PNEC sediment 552 mg/kg (fresh water) PNEC soil 28 mg/kg (soil) - Additional information: The lists that were valid during the compilation were used as basis.



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- 8.2 Exposure controls
Personal protective equipment
General protective and hygienic measures
Keep away from food, beverages and fodder.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.
Gases, fumes and aerosols should not be inhaled.
Breathing equipment:
In case of brief exposure or low pollution use breathing filter apparatus. In case of intensive or longer exposure use
breathing apparatus that is independent of circulating air.
- Recommended filter device for short term use:
Filter A
Combination filter A-P2
Protection of hands: Solvent resistant gloves
- Material of gloves
Nitrile rubber, NBR
Fluorocarbon rubber (Viton)
The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and
varies from manufacturer to manufacturer.
Penetration time of glove material
Material of gloves is recommended for a short-term single use to protect from splashes. For permanent usage contact
manufacturer of gloves.
- Eve protection: Tightly sealed safety glasses.

- Eye protection: Tightly sealed safety glasses. - Body protection: Protective work clothing.

SECTION 9: Physical and chemical properties

-9.1 Information on basic physical and chemical properties		
- General Information - Appearance:		
Form:	Fluid	
Colour:	Colourless	
- Smell:	Benzen-like	
	mild	
- Odour threshold:	Not determined	
-pH-value:	Not applicable	
- Change in condition Melting point/Melting range: Boiling point/Boiling range:	Not determined > 80 °C	
- Flash point:	-10 °C	
- Ignition temperature:	275 °C (lowest level for individual components)	
- Self-inflammability:	Product is not selfigniting.	
-Danger of explosion:	Product is not explosive. However, formation of explosive air/steam mixtures is possible.	
- Critical values for explosion: Lower:	0.6 Vol %	
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Upper:	12 Vol % (Higher and lower level for individual components)	
- Vapour pressure at 20 °C:	85 hPa	
- Density at 20 °C	$0.73 \ g/cm^3$	
- Relative density	Not determined	
- Vapour density	Not determined	
- Evaporation rate	Not determined	
- Solubility in / Miscibility with		
Water:	Insoluble	
- Partition coefficient (n-octanol/water): Not determined		
- Viscosity:		
dynamic:	Not determined	
kinematic:	Not determined	
- Solvent content:		
Organic solvents:	100 %	
-9.2 Other information	No further relevant information available.	

SECTION 10: Stability and reactivity

- 10.1 Reactivity No further relevant information available.

- 10.2 Chemical stability

- *Thermal decomposition / conditions to be avoided:* No decomposition if used and stored according to specifications. To avoid: warmth, flames, sparks

- 10.3 Possibility of hazardous reactions Reacts with strong oxidizing agents

- 10.4 Conditions to avoid No further relevant information available.

- 10.5 Incompatible materials: strong oxidizing agents

- 10.6 Hazardous decomposition products: Formation of carbon monoxide and carbon dioxide in case of fire.

SECTION 11: Toxicological information

-11.1 Information on toxicological effects

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

- LD/LC50 values that are relevant for classification:			
64742-49-	0 naphtha (p	petroleum). hydrotreated, light	
Oral	LD50	> 5840 mg/kg (rat)	
Dermal	LD50	> 2000 mg/kg (rab)	
		> 2920 mg/kg (rbt)	
Inhalative	LC 50 / 4 h	> 25 mg/l (rat) (vapour)	
		88 mg/l (rat)	
67-63-0 pr	67-63-0 propan-2-ol		
Oral	LD50	4570 mg/kg (rat)	
Dermal	LD50	> 2000 mg/kg (rab)	
		13400 mg/kg (rab)	
L		(Contd. on page 7)	

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Inhalative LC 50 / 4 h 30 mg/l (rat)

- Primary irritant effect:
- Skin corrosion/irritation
- Causes skin irritation. - Serious eye damage/irritation
- Causes serious eye irritation.
- Respiratory or skin sensitisation Based on available data, the classification criteria are not met.
- Other information (about experimental toxicology): No experimental indications of mutagenic effects.
- Subacute to chronic toxicity:
- STOT-repeated exposure:

Not expected to cause organ damage arising from prolonged or repeated exposure.

67-63-0 propan-2-ol

Oral NOAEL 900 mg/kg (rat) ((90d) OECD 408)

-Aspiration hazard:

May be fatal if swallowed and enters airways. Based on physical and chemical properties of the product.

- Additional toxicological information:

Prolonged/repeated contact may cause defatting of the skin which can lead to dermatitis. Aspiration into the lungs may cause chemical pneumonitis which can be fatal.

- CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

The ingredients in this mixture do not meet the criteria for classification as CMR categories according to CLP.

- Germ cell mutagenicity Based on available data, the classification criteria are not met.
- Carcinogenicity Based on available data, the classification criteria are not met.
- Reproductive toxicity Based on available data, the classification criteria are not met.
- STOT-single exposure
- May cause drowsiness or dizziness.
- STOT-repeated exposure Based on available data, the classification criteria are not met.
- -Aspiration hazard
- May be fatal if swallowed and enters airways.

SECTION 12: Ecological information

-12.1 Toxicity

- Aquatic toxicity:			
64742-49-0	64742-49-0 naphtha (petroleum). hydrotreated, light		
EC 50	1-10 mg/l (Aquatic invertebrates)		
	1-10 mg/l (Algae)		
LC 50	10-100 mg/l (fish)		
NOELR	2.045 mg/l (Oncorhynchus mykiss) (28 d)		
	1 mg/l (Daphnia magna) (21 d (OECD 211))		
67-63-0 pr	opan-2-ol		
EC 50 / 48 h > 100 mg/l (Daphnia magna)			
EC 50 / 72 h > 100 mg/l (Scenedesmus subspicatus)			
LC 50 / 48	LC 50 / 48 h > 100 mg/l (Leuciscus idus)		
	tence and degradability No further relevant information available.		
- 12.3 Bioaccumulative potential			
swims on w	swims on water. Bioaccumulation possible.		

Evaporates within a day from water or soil surfaces.

- 12.4 Mobility in soil No further relevant information available.

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- Ecotoxical effects:

- Remark: The values for the aquatic toxicity derived from the test results of similar products.
- Additional ecological information:
- General notes:

Water hazard class 1 (Self-assessment): slightly hazardous for water. Do not allow to enter drainage system, surface or ground water

- 12.5 Results of PBT and vPvB assessment
- **PBT**: Not applicable.

- vPvB: Not applicable.

- 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

-13.1 Waste treatment methods

The following advice is related to new material and not to any processed products. In case of a mixture with other products other disposal methods may become necessary. If in doubt seek advice from product supplier or from local authorities.

- Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system. If possible, send to be recycled, otherwise burn or deposit in a certified facility.

- Waste disposal key number:

Since 01/01/99 the waste code numbers have not only been product-related but are also essentially application-related. The valid waste code number of the application can be obtained from the European waste catalogue.

- Uncleaned packagings:

- Recommendation:

Rented packaging: After optimal emptying, close immediately and return to the supplier without cleaning. Care should be taken that no other materials get into the packaging.

Other containers: After complete emptying and cleaning, send to be reconditioned or recycled.

Caution: Leftovers in the containers may cause the risk of explosion.

Uncleaned containers should not be perforated, cut or welded.

SECTION 14: Transport information	ECTION 14: Transport information	
- 14.1 UN-Number - ADR, IMDG, IATA	UN1993	
- 14.2 UN proper shipping name		
-ADR	1993 FLAMMABLE LIQUID, N.O.S. (OCTANES	
	ISOPROPANOL (ISOPROPYL ALCOHOL)), specia provision 640D	
- IMDG	FLAMMABLE LIQUID, N.O.S. (OCTANES	
	ISOPROPANOL (ISOPROPYL ALCOHOL)), MARIN	
	POLLUTANT	
-IATA	FLAMMABLE LIQUID, N.O.S. (OCTANES ISOPROPANOL (ISOPROPYL ALCOHOL))	
-14.3 Transport hazard class(es)		
-ADR		
- Class	3 (F1) Flammable liquids.	
- Label	3	



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- IMDG, IATA - Class - Label	3 Flammable liquids. 3
- 14.4 Packing group - ADR, IMDG, IATA	11
- 14.5 Environmental hazards: - Marine pollutant: - Special marking (ADR):	Yes Symbol (fish and tree) Symbol (fish and tree)
- Special marking (ADR). - 14.6 Special precautions for user - Kemler Number: - EMS Number:	Warning: Flammable liquids. 33 F-E,S-E
- 14.7 Transport in bulk according to Annex II and the IBC Code	o f Marpol Not applicable.
- Transport/Additional information:	
- ADR - Limited quantities (LQ) - Excepted quantities (EQ) - Transport category - Tunnel restriction code	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml 2 D/E
- IMDG - Limited quantities (LQ) - Excepted quantities (EQ)	1L Code: E2 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 500 ml
- UN "Model Regulation":	UN1993, FLAMMABLE LIQUID, N.O.S. ENVIRONMENTALLY HAZARDOUS, 3, II

SECTION 15: Regulatory information

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

- Labelling according to Regulation (EC) No 1272/2008 The product is classified and labelled according to the CLP regulation.

- Hazard pictograms



- Signal word Danger

- Hazard-determining components of labelling:
- naphtha (petroleum). hydrotreated, light - Hazard statements
- H225 Highly flammable liquid and vapour.

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(Contd. of page 9) H315 Causes skin irritation. H319 Causes serious eye irritation. H336 May cause drowsiness or dizziness. H304 May be fatal if swallowed and enters airways. H411 Toxic to aquatic life with long lasting effects. - Precautionary statements P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P271 Use only outdoors or in a well-ventilated area. P301+P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. Do NOT induce vomiting. *P331* P370+P378 In case of fire: Use for extinction: CO2, powder or water spray. P405 Store locked up. P403+P235 Store in a well-ventilated place. Keep cool. P501 Dispose of contents/container in accordance with local/regional/national/international regulations. - National regulations - Information about limitation of use: Employment restrictions concerning young persons must be observed. - VOC ~ 730 g/l volatile organic compounds (Council Directive 2010/75/EC). - 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Application: Directions for use: please refer to the Technical Infomation Sheet

- Relevant phrases

Complete wording of hazard statements and risk phrases (H- and R-phrases) mentioned in section 3. These phrases refer to the constituents. The labelling for this product is stated in section 2.

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H411 Toxic to aquatic life with long lasting effects.

- Department issuing data specification sheet: see item 1: Informing department

- Abbreviations and acronyms:

NOAEL: No Observed Adverse Effect Level

RPE: Respiratory Protective Equipment

RCR: Risk Characterisation Ratio (RCR= PEC/PNEC)

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

CLP: Classification, Labelling and Packaging (Regulation (EC) No. 1272/2008)

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

TRGS: Technische Regeln für Gefahrstoffe (Technical Rules for Dangerous Substances, BAuA, Germany)

DNEL: Derived No-Effect Level (REACH)

PNEC: Predicted No-Effect Concentration (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

vPvB: very Persistent and very Bioaccumulative Flam. Liq. 2: Flammable liquids, Hazard Category 2

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3



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Asp. Tox. 1: Aspiration hazard, Hazard Category 1 Aquatic Chronic 2: Hazardous to the aquatic environment - Chronic Hazard, Category 2 - * Data compared to the previous version altered.

