

BRAKE CALIPER PAINT – SPRAY

SECTION 1: SUBSTANCE/MIXTURE IDENTIFICATION AND MANUFACTURER/SUPPLIER IDENTIFICATION

1.1. Product identification:

BRAKE CALIPER PAINT – SPRAY

UFI:

AJP0-006G-X00J-VW0Q	BLACK
VNPO-G0VW-8002-H7KS	RED
3RP0-00K9-J00J-6K5U	SILVER
6TP0-H08P-V001-UWRW	YELLOW

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

Identified uses: Aerosol paint with a specific formula for the renovation of brake callipers. Adapted to rapid temperature changes to which the brake calliper is exposed.*

Uses advised against: not specified.

1.3. Data of the safety data sheet supplier

Przedsiębiorstwo RANAL Sp. z o.o.

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1.4. Emergency telephone

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SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification according to the Regulation (EC) no 1272/2008*:

Flam. Gas. 1 H222 Extremely flammable aerosol.*
Skin Irrit. 2 H315 Causes skin irritation.
Eye Irrit. 2* H319 Causes eye irritation.
STOT SE 3 H336 May cause drowsiness or dizziness.

EUH066 Repeated exposure may cause skin dryness or cracking.*

2.2. Label elements

According to the Regulation (EC) no 1272/2008.

Hazard pictograms and signal word*:



Signal word: **DANGER.**

Contains:

Acetone. Xylene
Ethyl acetate, 2-butoxyethanol.*

Hazard statements*:

H222 Extremely flammable aerosol.
H229 Pressurized container: May burst if heated.
H315 Causes skin irritation.
H319 Causes eye irritation.
H336 May cause drowsiness or dizziness.
EUH066 Repeated exposure may cause skin dryness or cracking.*

Precautionary statements*:

P102 Keep out of reach of children.
P210 Keep away from sources of heat/sparks/open flames/hot surfaces. No smoking.
P211 Do not spray on an open flame or other ignition source.
P251 Pressurized container. Do not pierce or burn, even after use.
P261 Avoid breathing fume/gas/mist/vapours/spray.
P271 Use only outdoors or in a well-ventilated area.
P305 + P351 + P338 IF IN EYES: Rinse continuously with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing. Remove contact lenses if present and easy to do. Continue rinsing.
P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50°C.

2.3. Other hazards

The Mixtures does not meet the criteria of PBT/vPvB in accordance with Annex XIII of the REACH Regulation.

Other hazards not reflected in classification: unknown*

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SECTION 3: COMPOSITION AND INFORMATION ON INGREDIENTS

3.1. Substances

Not applicable.

3.2. Mixtures

Component name Registration number	% weight	CAS No.	EC No.	Index no	Classification according to the Regulation 1272/2008
Acetone 01-2119471330-49-XXXX	0-30% *	67-64-1	200-662-2	606-001-00-8	Flam. Liq. 2, H225, Eye Irrit. 2, H319, STOT SE 3, H336. EUH066.
2-butoxyethanol* 01-2119475108-36-XXXX	0-8%	111-76-2	203-905-0	603-014-00-0	AcuteTox 4, H332, AcuteTox 4, H312, AcuteTox 4, H302, Skin Irrit 2, H315, Eye Irrit.2, H319
Xylene- mixture of isomers** 01-2119488216-32-XXXX	0-10% *	133020-7	215-535-7	601-02200-9	Flam. Liq. 3, H226, Asp. Tox. 1, H304, Acute Tox. 4, H312, Skin Irrit. 2, H315, Eye Irrit. 2, H319, Acute Tox. 4, H332, STOT SE 3, H335, STOT RE 2, H373
Butyl acetate* 01-2119485493-29-XXXX	<5%	123-86-4	204-658-1	607-02500-1	Flam. Liq. 3, H226, STOT SE 3, H336. EUH066
Ethyl acetate* 01-2119475103-46-XXXX	0-25%	141-78-6	205-500-4	607-022-00-5	Flam.Liq.2, H225, Eye Irrit.2, H319, STOT SE 3, H336, EUH066.
Propane* ***	0-25%	74-98-6	200-827-9	601-003-00-5	Flam.Gas.1, H220, Press. Gas, H280
Butane/Isobutane* ***	0-25%	106-97-8 75-28-5	203-448-7 200-857-2	601-004-00-0	Flam.Gas.1, H220, Press. Gas, H280
Dimethyl ether* 01-2119472128-37-XXXX	0-50%	115-10-6	204-065-8	603-019-00-8	Flam.Gas.1, H220, Press. Gas, H280

** Composition according to Regulation 1272/2008

<25% Ethylbenzene (CAS:100-41-4; EC:202-849-4; no. Index no: 601-023-00-4)

>75% Xylene (CAS:1330-20-7; EC:215-535-7; no. Index no: 601-022-00-9)

*** The product is a mixture of hydrocarbons obtained during the distillation of crude oil.

The main components of the product are: propane C3, isobutane, butane C4. It also contains other residual components (impurities) that do not affect the classification of the mixture: methane C1 <0.1 (%m/m), ethane, ethylene C2<4.0 (%m/m), pentane C5 <1.0 (%m/m), butadienes. The content of 1,3-butadiene is <0.1 (% m/m), it has not been classified as mutagenic and carcinogenic category 1B (Note K). Components included in the mixture are exempt from the registration obligation pursuant to Art. 2 REACH.

Full text of H phrases provided in section 16 of the Sheet.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

After skin contact*:

Take off contaminated clothes and shoes. Wash contaminated skin with plenty of water and soap. Continue rinsing for at least 10 minutes. If irritation symptoms appear and persist seek medical attention.

Contact with eyes*:

Rinse the contaminated eyes with a lot of lukewarm water for 15 minutes with the eyelids rolled up (remove contact lenses beforehand). Do not use a strong stream of water, so as not to damage the cornea. If irritation symptoms appear and persist seek medical attention.

After ingestion*:

N/A

After inhalation*:

Remove the injured person from the contaminated area. Place the injured person in a lying position. Provide warmth and peace. Loosen tight clothing. Provide open ventilation. If necessary - perform artificial respiration or administer oxygen. Call for medical help.

4.2. Most important symptoms both acute and delayed

When exposed to inhalation of high concentrations of vapours / aerosols of the preparation, irritation of the eyes (conjunctival redness, lacrimation, pain in the eyes) and respiratory mucosa (cough, burning sensation in the throat and nose) may occur. Vapours may cause Drowsiness and dizziness. May cause skin irritation and dryness (for details see section 11).*

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

If unconscious, do not administer anything orally and do not induce vomiting. Show the MSDS or the label/packaging to the medical personnel providing assistance. Persons providing help in the area with unknown concentration of vapours should be equipped with self-contained breathing apparatus.*

Indications for the doctor: symptomatic treatment.

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing agents: Foam resistant to alcohol, carbon dioxide (CO₂), extinguishing powder, water mist.*

Unsuitable extinguishing agents: strong water jet - risk of fire spreading

5.2. Special hazards arising from the substance or mixture

Extremely flammable product. Tanks exposed to fire or high temperature may explode as a result of pressure build-up inside them. Carbon oxides are released in the fire environment. Avoid inhalation of combustion products as they may be hazardous to health.*

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5.3. Advice for fire fighters

Cool closed containers exposed to fire or high temperature with dispersed water currents from a safe distance (risk of explosion), if possible and safely remove them from the hazard area. After removing from the hazard area, continue spraying until they are completely cooled. Do not let the fire-fighting water reach sewage system or water courses.

The resulting sewage and fire residues should be disposed of in accordance with applicable regulations. People involved in extinguishing the fire should be trained, equipped with self-contained breathing apparatus and full protective clothing.*

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency measures

Notify the surroundings about the failure. Remove from the hazard area all persons who are not involved in the liquidation of the consequences of the accident. Avoid contamination of eyes, skin and clothing. Do not inhale vapour. ATTENTION: If released in a closed room, ensure its effective ventilation/airing. Eliminate all ignition sources - put out open fire, do not smoke, do not use sparking equipment or tools, eliminate hot surfaces and other heat sources.*

6.2. Environmental precautions

In the event of product leaks from aerosol cans, place the leaking containers in substitute containers and wait until the pressure in the containers is reduced. Prevent the product from entering into sewage system, water and soil.

6.3. Methods and materials for containment and cleaning up

Absorb small amounts of the released liquid with inert, non-flammable absorbent material (e.g. earth, sand, vermiculite), collect into a closed, labelled waste container. In the event of a large leak, embank the place where the liquid has accumulated, pump the collected liquid out; Cover small amounts of spilled liquid with non-flammable absorbent material (sand, diatomaceous earth, universal binding material), collect into a closed container. Ensure adequate ventilation. Do not wash with water or water based cleaning agents.*

6.4. Reference to other sections

Disposal considerations – see section 13 of the Sheet.

Personal protection measures – see section 8 of the Sheet.

SECTION 7: HANDLING AND STORAGE OF SUBSTANCES AND MIXTURES

7.1. Precautions for safe handling

When working with the product, apply the general principles of hygiene and occupational health and safety regulations for working with chemicals (see section 15). Ensure efficient ventilation of the room (general/local exhaust). Avoid contact of the product with skin and eyes. Do not eat, drink or smoke while working with the product, except in the places designed for this; wash hands before breaks and at the end of work. Keep ignition sources away - do not smoke. Take precautionary measures against static discharges.*

7.2. Conditions for safe storage, including any incompatibilities

Store only in original container, in a cool and dry place. Store in a closed place, protect against unauthorized access. Do not store together with food, drinks and animal feed. Eliminate sources of heat and ignition. Do not smoke. Protect the containers against direct sunlight. Keep away from strong oxidants.*

7.3. Special end use (s)

No data.*

SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION MEASURES

8.1. Control parameters*

Xylene [CAS: 1330-20-7]

MPC– 100 mg/m³ MPIC -200 mg/m³ , („skin“)

Ethylbenzene [CAS: 100-41-4]

MPC– 200 mg/m³ MPIC - 400 mg/m³ , („skin“)

Acetone [CAS: 67-64-1]

MPC– 600 mg/m³ MPIC– 1800 mg/m³

Butyl acetate [CAS: 123-86-4]

MPC– 240 mg/m³ MPIC– 720 mg/m³

Ethyl acetate [CAS: 141-78-6]

MPC– 734 mg/m³ MPIC– 1468 mg/m³

2-butoxyethanol [CAS: 111-76-2]

MPC– 98 mg/m³ MPIC - 200 mg/m³ , („skin“)

Propane [CAS: 74-98-6]

MPC 1800 mg/m³

Butane [CAS: 106-97-8]

MPC– 1900 mg/m³ MPIC– 3000 mg/m³

Dimethyl ether [CAS: 115-10-6]

MPC 1000 mg/m³

Labelling the substance with the notation "skin" means that the absorption of the substance through the skin may be just as important as for inhalation exposure.

8.2 Exposure controls*

Proper technical security:

Under normal working conditions, it is sufficient to provide efficient ventilation of the room. Observe the general rules of precaution when working with chemicals. Do not eat, drink or smoke while working. Keep the product away from food, drinks and animal feed. Avoid contact

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of the product with skin and eyes. Wash hands before each break and at the end of work. Take off contaminated clothing immediately and wash skin with plenty of water. Do not breathe gases/vapours/spray.

Eye or face protection:

The use of protective goggles to protect against mist, liquid droplets and splashes is recommended.

Hands and skin protection:

Protective gloves made of nitrile rubber resistant to solvents. The glove material has to be impermeable and resistant to the product. Selection of the glove material on consideration of the breakthrough times, rates of diffusion and degradation. Moreover, 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. Information on the exact penetration time should be obtained from the glove manufacturer and has to be observed. Use protective hand cream. Working clothes.

Respiratory protection:

In the event of a failure or exceeding the permissible concentration values of the substance in the work environment, use a certified respirator. The minimum requirement is a half-mask with an A1P2 filter or a full-face mask with a respiratory protection device that is independent of the ambient air.

Thermal hazards:

Not applicable.

Environmental control

Consider taking precautionary measures to secure the area around storage tanks. Avoid reaching soil, sewage and water courses.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties*

Physical form	liquid in aerosol can
Colour	according to specification
Odour	characteristic
Odour threshold	not specified
pH value	not applicable.
Melting/freezing point	not specified
Density (20°C)	0.7– 0.8 g/cm ³ *
Flash point	-105°C (propane)
Initial boiling point (1013 hPa)	-42°C to 142°C (propane, xylene respectively)
Flammability (solid, gas):	extremely flammable
Top/bottom explosion limit	1.9% - 9.0% vol. *
Vapour pressure (20°C)	> 0.1 MPa (-15°C), < 2.55 MPa (70°C) – for propellant
Vapour density (air=1)	> 1
Explosive properties	vapour of the product may form explosive mixtures with air*
Auto ignition point	>287°C
Oxidizing properties	no data*

9.2. Other information

No data.*

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

No data.*

10.2. Chemical stability

The product is stable under normal conditions of use and storage.

10.3. Possibility of hazardous reactions

Oxidants, strong acids.*

10.4. Conditions to be avoided

Avoid high temperature – above 50°C, protect from direct sunlight, avoid open flames, electrostatic discharges and other ignition sources. Avoid formation of mixtures of product vapours or spray with air.

10.5. Incompatible materials

Strong oxidants, acids, bases.*

10.6. Hazardous decomposition products

Carbon monoxide and carbon dioxide.*

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects*

Toxicity of the components:

xylene,	CAS 133020-7
LD50:	4300 mg/kg *(oral, rat)
LC50:	1700 mg/kg (skin, rabbit)
LC50:	22100 mg/m ³ *(inhalation, rat, 4h)
Acetone,	CAS 67-64-1
LD50:	5800 mg/kg (oral)*
LD50:	7400 mg/kg (skin, rat)*
LC50:	7.6 mg/l (inhalation, rat, 4h)*
Ethylbenzene, CAS 100-41-4	
LD50:	3500 mg/kg (oral, rat)*
LD50:	15500 mg/kg (skin, rabbit) (acetone)*
LC50:	17.2 mg/l (inhalation, rat)
Butyl acetate, CAS 123-86-4*	
LD50:	14000 mg/kg (oral, rat)
LD50:	>5000 mg/kg (skin, rabbit)
LC50:	9660 mg/m ³ (inhalation, rat, 4h)

Skin corrosion/irritation:
Repeated exposure may cause skin dryness or cracking.*

Serious eye damage/eye irritation:
Causes eye irritation.

Allergic effect on airways or skin:
Based on available data the classification criteria are not met.

Mutagenic effect on germ cells:
Based on available data the classification criteria are not met.

Carcinogenic effect:
Based on available data the classification criteria are not met.

Harmful effect on reproduction:
Based on available data the classification criteria are not met.

Specific target organ toxicity – single exposure:
May cause drowsiness or dizziness.

SECTION 12: ECOLOGICAL INFORMATION

12.1. Toxicity*

Toxicity of the mixture:
The product is not classified as environmentally hazardous.

12.2. Persistence and degradability

Unknown.

12.3. Bioaccumulative potential

Unknown.

12.4. Mobility in soil

No data. *

12.5. Results of PBT and vPvB assessment

The product does not contain any components that meet the criteria of PBT or vPvB.

12.6. Other hazardous effects

None. *

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods*

Act in accordance with the provisions of applicable law. (2013, 888).

Waste code:

15 01 10* packaging containing residues of or contaminated by dangerous substances.

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Since the waste code is assigned depending on its source, the end user should, taking into account the specific conditions of use of the product, define the waste and assign the appropriate code, in accordance with applicable regulations.

Do not discharge the product into the sewage system. Prevent contamination of surface and ground waters. Consider reuse. The waste product should be recovered or disposed of in authorized waste treatment / neutralization plants, in accordance with applicable regulations. Recycling / disposal of packaging waste should be carried out in accordance with applicable regulations. **ATTENTION:** Only completely emptied containers may be recycled! Use the services of companies with appropriate permissions.

SECTION 14: TRANSPORT INFORMATION

The product is subject to the regulations on the transport of dangerous goods contained in:
ADR (road transport), RID (rail transport), ADN (inland transport), IMDG (sea transport), ICAO / IATA (air transport).



14.1. UN number

UN 1950

14.2. UN proper shipping name

AEROSOLS, flammable

14.3. Transport hazard class (-es)

2

Warning label No 2.1

14.4. Packaging group

N/A *

14.5. Environmental hazards

The Mixture is not environmentally hazardous according to the criteria contained in transport regulations.

14.6. Special precautions for users

None.*

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

No data.*

SECTION 15: REGULATORY INFORMATION

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

- Commission Regulation EU no 2015/830 of 28 May 2015 amending Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH)
- Regulation (EC) No 1907/2006 of the European Parliament and of the Council on the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH), establishing a European Chemicals Agency.
- Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 as amended.
- European Agreement (ADR) concerning the International Carriage of Dangerous Goods by Road.
- DIRECTIVE 2004/42/EC OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 21 April 2004 on the limitation of emissions of volatile organic compounds due to the use of organic solvents in certain paints and varnishes and vehicle refinishing products, and amending Directive 1999/13/EC.

15.2. Chemical safety assessment

None. *

SECTION 16: OTHER INFORMATION

Full text of H phrases used in sections 2-15 of the Sheet: *

- H220 Extremely flammable gas.
- H225 Highly flammable liquid and vapour.
- H280 Contains gas under pressure: may explode if heated.
- H302 Harmful if swallowed. *
- H304 May be fatal if swallowed and enters airways.
- H312 Harmful in contact with skin.
- H315 Causes skin irritation.
- H319 Causes eye irritation.
- H332 Harmful if inhaled.
- H335 May cause respiratory irritation.
- H336 May cause drowsiness or dizziness.
- H373 May cause damage to organs: central nervous system, liver, kidneys through prolonged or repeated exposure.
- EUH 066 Repeated exposure may cause skin dryness or cracking.

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Explanation of abbreviations and acronyms: *

MPC	Maximum permissible concentrations.
MPIC	Maximum Permissible Instantaneous Concentration.
NDSP	Maximum Permissible Ceiling Concentration.
vPvB	(substance, which is) very Persistent and very Bio-accumulative.
PNEC	Predicted no effect concentration.
DNEL	No effect level.
LD50	Dose at which death of 50% of test animals is observed.
LC50	Concentration at which death of 50% of test animals is observed.
ECX	Concentration at which an X % decrease in growth or growth rate is observed.
LOEC	The lowest concentration that produces an observable effect.
NOEL	The highest concentration of a substance at which no effects are observed.
RID	Regulations for the international carriage of dangerous goods by rail.
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road.
IMDG	International Marine Code of Dangerous Goods.
IATA	International Air Transport Association.
UVCB	Substances of unknown or variable composition, complex reaction products or biological materials.

Training:

Before they start working with the product, the users should learn the Health and Safety regulations regarding handling chemicals, and in particular, undergo an appropriate workplace training. Persons involved in the transport of hazardous materials, in accordance with the ADR Agreement, should be properly trained in the scope of their duties (general training, on-the-job training and safety training).

Classification of mixtures and evaluation method according to the Regulation (EC) No. 1272/2008 [CLP]:

Physical hazards: Flash point (°C).

Health hazard: Calculation method

Environmental hazards: Calculation method

Information for the reader:

It is the user's responsibility to take all necessary steps to comply with national law. The information contained in the above sheet describes the safety requirements for the use of the product. The user is fully responsible for determining the suitability of the product for specific purposes.. The data contained in this sheet does not constitute an assessment of the user's workplace safety. The material safety data sheet cannot be treated as a guarantee of the properties of the product.

This Safety Data Sheet has been developed on the basis of the Safety Data Sheets of components provided by the manufacturer and or on-line databases as well as the applicable regulations on hazardous substances and chemical preparations.

The above information is based on the currently available data characterizing the product as well as the manufacturer's experience and knowledge in this area. They do not constitute a qualitative description of the product or a promise of specific properties. They should be treated as an aid for safe handling, transport, storage and use of the product. This does not release the user from responsibility for the misuse of the above information and from complying with all applicable legal standards in this field.

Changes in the Sheet compared to the previous version: 1.1-2, 2.1-3, 3.2, 4.1-3, 5.1-3, 6.1-3, 7.1-3, 8.1-2, 9.1-2, 10.1, 10.3-6, 11.1, 12.4, 12.6, 13.1, 14.4, 14.6-7, 15.1-2, 16. Changes have been marked with *.

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