

SAFETY DATA SHEET

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

1.1. Product identifier

Trade name

Welding Spray

Product no.

-

REACH registration number

Not applicable

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

Relevant identified uses of the substance or mixture

NA

Metal surface treatment products, including galvanic and electroplating products, (PC14)

Non industrial spraying (PROC 11)

Formulation [mixing] of preparations and/or re-packaging (excluding alloys) (SU 10)

Professional uses: Public domain (administration, education, entertainment, services, craftsmen) (SU 22)

Formulation of preparations (ERC2)

Metal articles (AC7)

Uses advised against

-

The full text of any mentioned and identified use categories are given in section 16

1.3. Details of the supplier of the safety data sheet

Company and address

Pureno A/S

Rønnevangs Allé 8

3400 Hillerød

Denmark

Tlf.: +45 70 260 267

Contact person

Kenneth Christensen

E-mail

mail@pureno.dk

SDS date

2017-01-02

SDS Version

6.0

1.4. Emergency telephone number

Contact The National Poisons Information Service (dial 111, 24 h service). See section 4 "First aid measures".

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Aerosol 3; H229

Eye Irrit. 2; H319

Aquatic Chronic 3; H412

See full text of H-phrases in section 2.2.

2.2. Label elements

▼ Hazard pictogram(s)

Signal word

Warning

Hazard statement(s)

Pressurised container: May burst if heated. (H229)

Causes serious eye irritation. (H319)

Harmful to aquatic life with long lasting effects. (H412)

▼ Safety statement(s)**General**If medical advice is needed, have product container or label at hand. (P101).
Keep out of reach of children. (P102).**Prevention**

Do not pierce or burn, even after use. (P251).

ResponseIF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
(P305+P351+P338).**Storage**

Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122°F. (P410+P412).

Disposal

Dispose of contents/container to an approved waste disposal plant. (P501).

Identity of the substances primarily responsible for the major health hazards

-

▼ 2.3. Other hazards

This product contains an organic solvent. Repeated or prolonged exposure to organic solvents may result in adverse effects to the nervous system and internal organs such as liver and kidneys.

Additional labelling

12 mass percent of the content is flammable

Additional warnings

-

VOC

-

SECTION 3: Composition/information on ingredients**▼ 3.1/3.2. Substances/Mixtures**

NAME:	ethanol
IDENTIFICATION NOS.:	CAS-no: 64-17-5 EC-no: 200-578-6 Index-no: 603-002-00-5
CONTENT:	5-10%
CLP CLASSIFICATION:	Flam. Liq. 2, Eye Irrit. 2 H225, H319
NOTE:	S

NAME:	carbon dioxide
IDENTIFICATION NOS.:	CAS-no: 124-38-9 EC-no: 204-696-9
CONTENT:	5-10%
CLP CLASSIFICATION:	Refrig. Liq. Gas H281
NOTE:	L

NAME:	propan-2-ol
IDENTIFICATION NOS.:	CAS-no: 67-63-0 EC-no: 200-661-7 Index-no: 603-117-00-0
CONTENT:	3-5%
CLP CLASSIFICATION:	Flam. Liq. 2, Eye Irrit. 2, STOT SE 3 H225, H319, H336
NOTE:	S

NAME:	amider, C8-18- og C18-umættede, N,N-bis-(hydroxyethyl)
IDENTIFICATION NOS.:	CAS-no: 68155-07-7 EC-no: 931-329-6
CONTENT:	1-3%
CLP CLASSIFICATION:	Skin Irrit. 2, Eye Dam. 1, Aquatic Chronic 2 H315, H318, H411

NAME:	2,2',2"-nitrilotriethanol
IDENTIFICATION NOS.:	CAS-no: 102-71-6 EC-no: 203-049-8
CONTENT:	1-3%
CLP CLASSIFICATION:	Skin Irrit. 2, Eye Irrit. 2 H315, H319

(*) See full text of H-phrases in chapter 16. Occupational exposure limits are listed in section 8, if these are available.
S = Organic solvent L = European occupational exposure limit.

Other information

Eye Cat. 2 Sum = Sum(Ci/S(G)CLi) = 3,4864 - 5,2296

Skin Cat. 2 Sum = Sum(Ci/S(G)CLi) = 0,388 - 0,582

N chronic (CAT 3) Sum = Sum(Ci/M(chronic))*25*0.1*10^CATi) = > 1 - 1,4256

SECTION 4: First aid measures**4.1. Description of first aid measures****▼ General information**

In the case of accident: Contact a doctor or casualty department – take the label or this safety data sheet. The doctor can contact The National Poisons Information Service (dial 111, 24 h service). Contact a doctor if in doubt about the injured person's condition or if the symptoms persist. Never give an unconscious person water or other drink.

▼ Inhalation

Bring the person into fresh air and stay with him.

▼ Skin contact

Immediately remove contaminated clothing and shoes. Ensure that skin, which has been exposed to the material, is washed thoroughly with water and soap. Skin cleanser can be used. DO NOT use solvents or thinners.

▼ Eye contact

Remove contact lenses and open eyes widely. Flush eyes with water or saline water(20-30°C) for at least 15 minutes. Seek medical assistance and continue flushing during transport.

▼ Ingestion

Provide plenty of water for the person to drink and stay with him/her. In case of malaise, seek medical advice immediately and bring the safety data sheet or label from the product. Do not induce vomiting, unless recommended by the doctor. Have the victim lean forward with head down to avoid inhalation of- or choking on vomited material.

Burns

Not applicable

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

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

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

No special

Information to medics

Bring this safety data sheet.

SECTION 5: Firefighting measures**▼ 5.1. Extinguishing media**

Recommended: alcohol-resistant foam, carbonic acid, powder, water mist. Waterjets should not be used, since they can spread the fire.

▼ 5.2. Special hazards arising from the substance or mixture

If the product is exposed to high temperatures, e.g. in the event of fire, dangerous catabolic substances are produced. These are: Carbon oxides. Fire will result in dense black smoke. Exposure to combustion products may harm your health. Fire fighters should wear appropriate protection equipment. Closed containers, which are exposed to fire, should be cooled with water. Do not allow fire-extinguishing water to enter the sewage system and nearby surface waters.

▼ 5.3. Advice for firefighters

Wear self-contained breathing apparatus and protective clothing to prevent contact. Upon direct exposure contact The National Poisons Information Service (dial 111, 24 h service) in order to obtain further advice.

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

No specific requirements.

▼ 6.2. Environmental precautions

Avoid discharge to lakes, streams, sewers, etc. In the event of leakage to the surroundings, contact local environmental authorities. It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment.

▼ 6.3. Methods and material for containment and cleaning up

Use sand, sawdust, earth, vermiculite, diatomaceous earth to contain and collect non-combustible absorbent materials and place in container for disposal, according to local regulations. To the extent possible cleaning is performed with normal cleaning agents. Avoid use of solvents.

▼ 6.4. Reference to other sections

See section on "Disposal considerations" in regard of handling of waste. See section on 'Exposure controls/personal protection' for protective measures.

SECTION 7: Handling and storage

▼ 7.1. Precautions for safe handling

Avoid static electricity. Protect electrical equipment in accordance with current standards. To divert static electricity during transmission, containers must be grounded and connected by wire with the receiving containers. Do not use spark-forming tools.

Smoking, storage of tobacco, consumption and storage of food or liquids are not allowed in the workrooms. It is recommended to install waste collection trays in order to prevent emissions to the waste water system and surrounding environment. See section on 'Exposure controls/personal protection' for information on personal protection.

▼ 7.2. Conditions for safe storage, including any incompatibilities

Always store in containers of the same material as the original container. Containers that have been opened must be carefully resealed and kept upright to prevent leakage.

Beware, this chemical can form peroxides. The potential contents of peroxide must be controlled regularly after opening, for example every 6th month.

Storage temperature

No data available.

▼ 7.3. Specific end use(s)

This product should only be used for applications quoted in section 1.2

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

▼ OEL

carbon dioxide (EH40/2005)

Long-term exposure limit (8-hour TWA reference period): 5000 ppm | 9150 mg/m³

Short-term exposure limit (15-minute reference period): 15000 ppm | 27400 mg/m³

ethanol (EH40/2005)

Long-term exposure limit (8-hour TWA reference period): 1000 ppm | 1920 mg/m³

Short-term exposure limit (15-minute reference period): - ppm | - mg/m³

▼ DNEL / PNEC

DNEL (amider, C8-18- og C18-umættede, N,N-bis-(hydroxyethyl)): 4,16 mg/kg bw/day

Exposure: Dermal

Duration of Exposure: Long term – Systemic effects - Workers

DNEL (amider, C8-18- og C18-umættede, N,N-bis-(hydroxyethyl)): 73,4 mg/m³

Exposure: Inhalation

Duration of Exposure: Long term – Systemic effects - Workers

DNEL (amider, C8-18- og C18-umættede, N,N-bis-(hydroxyethyl)): 0,09 mg/cm²

Exposure: Dermal

Duration of Exposure: Long term – Local effects - Workers

DNEL (amider, C8-18- og C18-umættede, N,N-bis-(hydroxyethyl)): 2,5 mg/kg bw/day

Exposure: Dermal

Duration of Exposure: Long term – Systemic effects - General population

DNEL (amider, C8-18- og C18-umættede, N,N-bis-(hydroxyethyl)): 21,73 mg/m³

Exposure: Inhalation

Duration of Exposure: Long term – Systemic effects - General population

DNEL (amider, C8-18- og C18-umættede, N,N-bis-(hydroxyethyl)): 6,25 mg/kg bw/day

Exposure: Oral

Duration of Exposure: Long term – Systemic effects - General population

DNEL (amider, C8-18- og C18-umættede, N,N-bis-(hydroxyethyl)): 0,056 mg/cm²

Exposure: Dermal

Duration of Exposure: Long term – Local effects - General population

DNEL (ethanol): 950 mg/m³
 Exposure: Inhalation
 Duration of Exposure: Long term – Systemic effects - Workers
 DNEL (ethanol): 1900 mg/m³
 Exposure: Inhalation
 Duration of Exposure: Short term – Local effects - Workers
 DNEL (ethanol): 343 mg/kg legemsvægt pr. dag
 Exposure: Dermal
 Duration of Exposure: Long term – Systemic effects - Workers
 DNEL (ethanol): 114 mg/m³
 Exposure: Inhalation
 Duration of Exposure: Long term – Systemic effects - General population
 DNEL (ethanol): 950 mg/m³
 Exposure: Inhalation
 Duration of Exposure: Short term – Local effects - General population
 DNEL (ethanol): 206 mg/kg legemsvægt pr. dag
 Exposure: Dermal
 Duration of Exposure: Long term – Systemic effects - General population
 DNEL (ethanol): 87 mg/kg legemsvægt pr. dag
 Exposure: Oral
 Duration of Exposure: Long term – Systemic effects - General population
 DNEL (propan-2-ol): 888 mg/kg bw/dag
 Exposure: Dermal
 Duration of Exposure: Long term – Systemic effects - Workers
 DNEL (propan-2-ol): 500 mg/m³
 Exposure: Inhalation
 Duration of Exposure: Long term – Systemic effects - Workers
 DNEL (propan-2-ol): 319 mg/kg bw/dag
 Exposure: Dermal
 Duration of Exposure: Long term – Systemic effects - General population
 DNEL (propan-2-ol): 89 mg/m³
 Exposure: Inhalation
 Duration of Exposure: Long term – Systemic effects - General population
 DNEL (propan-2-ol): 26 mg/kg bw/dag
 Exposure: Oral
 Duration of Exposure: Long term – Systemic effects - General population

PNEC (amider, C8-18- og C18-umættede, N,N-bis-(hydroxyethyl)): 0,0024 mg/l
 Exposure: Freshwater
 PNEC (amider, C8-18- og C18-umættede, N,N-bis-(hydroxyethyl)): 0,00024 mg/l
 Exposure: Marine water
 PNEC (amider, C8-18- og C18-umættede, N,N-bis-(hydroxyethyl)): 0,024 mg/l
 Exposure: Intermittent release
 PNEC (amider, C8-18- og C18-umættede, N,N-bis-(hydroxyethyl)): 0,83 mg/l
 Exposure: Sewage Treatment Plant
 PNEC (amider, C8-18- og C18-umættede, N,N-bis-(hydroxyethyl)): 0,00648 mg/kg tør vægt
 Exposure: Soil
 PNEC (amider, C8-18- og C18-umættede, N,N-bis-(hydroxyethyl)): 0,0145 mg/kg
 Exposure: Freshwater sediment
 PNEC (ethanol): 0,96 mg/l
 Exposure: Freshwater
 PNEC (ethanol): 0,79 mg/l
 Exposure: Marine water
 PNEC (ethanol): 2,75 mg/l
 Exposure: Intermittent release
 PNEC (ethanol): 580 mg/l
 Exposure: Sewage Treatment Plant
 PNEC (ethanol): 3,6 mg/kg
 Exposure: Freshwater sediment
 PNEC (ethanol): 2,9 mg/kg
 Exposure: Marine water sediment
 PNEC (ethanol): 0,63 mg/kg
 Exposure: Soil
 PNEC (propan-2-ol): 552 mg/kg
 Exposure: Marine water sediment
 PNEC (propan-2-ol): 140,9 mg/l
 Exposure: Freshwater
 PNEC (propan-2-ol): 28 mg/kg
 Exposure: Soil
 PNEC (propan-2-ol): 140,9 mg/l
 Exposure: Marine water
 PNEC (propan-2-ol): 140,9 mg/l
 Exposure: Intermittent release
 PNEC (propan-2-ol): 251 mg/l
 Exposure: Sewage Treatment Plant
 PNEC (propan-2-ol): 552 mg/kg
 Exposure: Freshwater sediment

8.2. Exposure controls

- ▼ Compliance with the given occupational exposure limits values should be controlled on a regular basis.

General recommendations

- ▼ Observe general occupational hygiene standards.

Exposure scenarios

In the event exposure scenarios are appended to the safety data sheet, the operational conditions and risk management measures in these shall be complied with.

Exposure limits

Professional users are subjected to the legally set maximum concentrations for occupational exposure. See occupational hygiene limit values above.

Appropriate technical measures

Airborne gas and dust concentrations must be kept at a minimum and below current limit values (see above). Installation of an exhaust system if normal air flow in the work room is not sufficient is recommended. Ensure emergency eyewash and -showers are clearly marked.

Hygiene measures

In between use of the product and at the end of the working day all exposed areas of the body must be washed thoroughly. Always wash hands, forearms and face.

Measures to avoid environmental exposure

No specific requirements.

Individual protection measures, such as personal protective equipment**Generally**

Use only CE marked protective equipment.

Respiratory Equipment

If ventilation at the work place is insufficient, use a half- or whole mask with an appropriate filter or an air-supplied breathing apparatus depending on the concrete work situation and how long you will be using the product.

Skin protection

Wear appropriate protection clothing, e.g. coveralls in polypropylene approved type 6 and Category III.

Hand protection

Recommended: Nitrile rubber

Eye protection

Wear safety glasses with side shields.

SECTION 9: Physical and chemical properties**▼ 9.1. Information on basic physical and chemical properties**

Form	Aerosol
Colour	Colourless
Odour	None
pH	No data available.
Viscosity (40°C)	No data available.
Density (g/cm ³)	No data available.

▼ Phase changes

Melting point (°C)	No data available.
Boiling point (°C)	No data available.
Vapour pressure	No data available.

▼ Data on fire and explosion hazards

Flashpoint (°C)	24
Ignition (°C)	No data available.
Self-ignition (°C)	No data available.
Explosion limits (Vol %)	No data available.

▼ Solubility

Solubility in water	Soluble
n-octanol/water coefficient	No data available.

▼ 9.2. Other information

Solubility in fat (g/L)	No data available.
-------------------------	--------------------

SECTION 10: Stability and reactivity**10.1. Reactivity**

No data available

▼ 10.2. Chemical stability

The product is stable under the conditions, noted in the section "Handling and storage".

10.3. Possibility of hazardous reactions

No special

10.4. Conditions to avoid

No special

▼ 10.5. Incompatible materials

Strong acids, strong bases, strong oxidizing agents, and strong reducing agents.

10.6. Hazardous decomposition products

The product is not degraded when used as specified in section 1.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****▼ Acute toxicity**

Substance	Species	Test	Route of exposure	Result
2,2',2"-nitrilotriethanol	Rabbit	LD50	Oral	2200 mg/kg
2,2',2"-nitrilotriethanol	Mouse	LD50	Oral	5846 mg/kg
2,2',2"-nitrilotriethanol	Guinea pig	LD50	Oral	2200 mg/kg
amider, C8-18- og C18-umættede...	Rabbit	LC50	Dermal	>2000mg/kg
	Rat	LC50	Oral	>2000 mg/kg
amider, C8-18- og C18-umættede...	Rat	LD50	Oral	>5000mg/kg
	Rat	NOAEL	NA	>1000 mg/kg
amider, C8-18- og C18-umættede...	Rabbit	LD50	Dermal	>2000 mg/kg
	Rat	LD50	Oral	5840 mg/kg
amider, C8-18- og C18-umættede...	Rat	LC50	Inhalation	47,5mg/l 8 h
	Rat	LC50	Inhalation	66,1mg/l 4 h
propan-2-ol	Rat	LC50	Inhalation	470000 ppm 0,5 h
propan-2-ol	Rabbit	LD50	Dermal	>17100 mg/kg
propan-2-ol	Rat	LD50	Oral	10470 mg/kg
propan-2-ol	Rat	LC50	Inhalation	124,7 mg/l
carbon dioxide				
ethanol				
ethanol				
ethanol				

▼ Skin corrosion/irritation

No data available.

Serious eye damage/irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

No data available.

Germ cell mutagenicity

No data available.

Carcinogenicity

No data available.

Reproductive toxicity

No data available.

STOT-single exposure

No data available.

STOT-repeated exposure

No data available.

Aspiration hazard

No data available.

▼ Long term effects

Neurotoxic effects: This product contains organic solvents, which may cause adverse effects to the nervous system. Symptoms of neurotoxicity include: loss of appetite, headache, dizziness, ringing in ears, tingling sensations of skin, sensitivity to the cold, cramps, difficulty in concentrating, tiredness, etc. Repeated exposure to solvents can result in the breaking down of the skin's natural fat layer and may result in an increased absorption potential of other hazardous substances at the area of exposure.

Irritation effects: This product contains substances, which may cause irritation upon exposure to skin, eyes or lungs. Exposure may result in an increased absorption potential of other hazardous substances at the area of exposure.

SECTION 12: Ecological information

12.1. Toxicity

Substance	Species	Test	Duration	Result
2,2',2"-nitrioltriethanol				
2,2',2"-nitrioltriethanol	Fish	LC50		1800-11800 mg/l
2,2',2"-nitrioltriethanol	Daphnia	LC50		1390-2038 mg/l
2,2',2"-nitrioltriethanol	Algae	EC50		470-750 mg/l
amider, C8-18- og C18-umættede...	Crustacean	IC50		>5000 mg/l
amider, C8-18- og C18-umættede...	Fish	LC50	96 h	1-5mg/l
amider, C8-18- og C18-umættede...	Daphnia	EC50	72h	5-15 mg/l
amider, C8-18- og C18-umættede...	Algae	EC50	48 h	1-5 mg/l
amider, C8-18- og C18-umættede...	Algae	NOEC	8d	>1800 mg/l
propan-2-ol	Fish	LC50	96 h	8970-9280 mg/l
propan-2-ol	Daphnia	EC50	24 h	9714 mg/l
propan-2-ol	Crustacean	EC10	18 h	5175 mg/l
propan-2-ol	Crustacean	EC50		>1000mg/l
propan-2-ol	Fish	LC50	48 h	8150 mg/l
ethanol	Fish	LC50	96h	1100 mg/l
ethanol	Daphnia	EC50	48 h	9268-14221 mg/l
ethanol	Algae	EC0	168 h	5000 mg/l
ethanol	Crustacean	EC0	16 h	6500 mg/l

12.2. Persistence and degradability

Substance	Biodegradability	Test	Result
2,2',2"-nitrioltriethanol	Yes	No data available	No data available
propan-2-ol	Yes	Modified OECD Screening Test	95%
ethanol	Yes	No data available	No data available

12.3. Bioaccumulative potential

Substance	Potential bioaccumulation	LogPow	BCF
propan-2-ol	No	No data available	No data available
carbon dioxide	No	0,83	No data available
ethanol	No	No data available	No data available

12.4. Mobility in soil

carbon dioxide: Log Koc= 0,735677, Calculated from LogPow (High mobility potential.).

12.5. Results of PBT and vPvB assessment

No data available

▼ 12.6. Other adverse effects

This product contains substances that are toxic to the environment. May result in adverse effects to aquatic organisms. This product contains substances, which due to poor biodegradability, may cause adverse long-term effects to the aquatic environment,

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product is covered by the regulations on hazardous waste.

Waste

EWC code
16.05.04

Specific labelling

-

▼ Contaminated packing

Packaging containing residues of the product must be disposed of similarly to the product.

SECTION 14: Transport information

14.1 – 14.4

This product is within scope of the regulations of transport of dangerous goods.

▼ ADR/RID

14.1. UN number	1950
14.2. UN proper shipping name	-
14.3. Transport hazard class(es)	2.2
14.4. Packing group	-
Notes	-
Tunnel restriction code	-

IMDG

UN-no.	1950
Proper Shipping Name	Aerosols
Class	2.2
PG*	-
EmS	F-D, S-U
MP**	NO
Hazardous constituent	-

IATA/ICAO

UN-no.	1950
Proper Shipping Name	Aerosols
Class	2.2
PG*	-

14.5. Environmental hazards

-

14.6. Special precautions for user

-

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

No data available

(*) Packing group

(**) Marine pollutant

SECTION 15: Regulatory information**15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****Restrictions for application**

People under the age of 18 shall not be exposed to this product cf. Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

Pregnant women and women breastfeeding must not be exposed to this product. The risk, and possible technical precautions or design of the workplace needed to eliminate exposure, must be considered.

Demands for specific education

-

Additional information

-

Sources

Council Directive 94/33/EC of 22 June 1994 on the protection of young people at work.

Council Directive 75/324/EEC of 20 May 1975 on the approximation of the laws of the Member States relating to aerosol dispensers.

The Control of Substances Hazardous to Health Regulations 2002. SI 2002/2677. The Stationery Office, 2002.

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 (CLP). EC regulation 1907/2006 (REACH).

15.2. Chemical safety assessment

No

SECTION 16: Other information

▼ **Full text of H-phrases as mentioned in section 3**

- H225 - Highly flammable liquid and vapour.
- H281 - Contains refrigerated gas; may cause cryogenic burns or injury.
- H315 - Causes skin irritation.
- H318 - Causes serious eye damage.
- H319 - Causes serious eye irritation.
- H336 - May cause drowsiness or dizziness.
- H411 - Toxic to aquatic life with long lasting effects.

The full text of identified uses as mentioned in section 1

- PC14 = Metal surface treatment products, including galvanic and electroplating products,
- PROC 11 = Non industrial spraying
- SU 10 = Formulation [mixing] of preparations and/or re-packaging (excluding alloys)
- SU 22 = Professional uses: Public domain (administration, education, entertainment, services, craftsmen)
- ERC2 = Formulation of preparations
- AC7 = Metal articles

Other symbols mentioned in section 2



Other

In accordance with Regulation (EC) No. 1272/2008 (CLP) the evaluation of the classification of the mixture is based on:

The classification of the mixture in regard of physical hazards has been based on experimental data.
The classification of the mixture in regard of health hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP)
The classification of the mixture in regard of environmental hazards are in accordance with the calculation methods given by Regulation (EC) No. 1272/2008 (CLP) It is recommended to hand over this safety data sheet to the actual user of the product. Information in this safety data sheet cannot be used as a product specification.
The information in this safety data sheet applies only to this specific product (mentioned in section 1) and is not necessarily correct for use with other chemicals/products.
A change (in proportion to the last essential change (first cipher in SDS version, see section 1)) is marked with a blue triangle.

The safety data sheet is validated by

KAO

**Date of last essential change
(First cipher in SDS version)**

2016-03-01

**Date of last minor change
(Last cipher in SDS version)**

2016-04-20