

Safety data sheet

according to 1907/2006/EC, Article 31



Printing date 09.11.2015

Revision: 09.11.2015

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

1.1 Product identifier

Trade name: **ROSTUMWANDLER - 400 ml**

Article number: 4000 354676

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

Sector of Use

SU3 Industrial uses: Uses of substances as such or in preparations at industrial sites

SU21 Consumer uses: Private households / general public / consumers

SU22 Professional uses: Public domain (administration, education, entertainment, services, craftsmen)

Application of the substance / the preparation: Anticorrosion additive

1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

Nordwest Handel AG

Berliner Str. 26 - 36

D-58135 Hagen

Phone: +49 (0)2331/4610

Fax: +49 (0)2331/461389

Further information obtainable from: Datenblatt ausstellender Bereich/fachkundige Person: sdb@nordwest.com

1.4 Emergency telephone number:

Deutschland:

Giftinformationszentrum (GIZ), Mainz - Tel. +49(0)6131/19240 (24 h von Mo. – So.)

Österreich:

Vergiftungsinformationszentrale der Gesundheit Österreich Tel. +43 1 406 43 43

Schweiz:

Tox Info Suisse Tel. 145, 24h oder +41 44 251 51 51

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008

Flam. Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

Eye Irrit. 2 H319 Causes serious eye irritation.

STOT SE 3 H336 May cause drowsiness or dizziness.

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

Signal word Danger

Hazard-determining components of labelling:

acetone

Hazard statements

H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P251 Do not pierce or burn, even after use.

P211 Do not spray on an open flame or other ignition source.

P261 Avoid breathing mist/vapours/spray.

P271 Use only outdoors or in a well-ventilated area.

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

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

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

Additional information:

EUH066 Repeated exposure may cause skin dryness or cracking.

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- **2.3 Other hazards**
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.

SECTION 3: Composition/information on ingredients

- **3.2 Chemical characterisation: Mixtures**
- **Description:** Mixture of substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 106-97-8 EINECS: 203-448-7 Index number: 601-004-00-0	butane ⚠ Flam. Gas 1, H220; Press. Gas, H280	30-60%
CAS: 74-98-6 EINECS: 200-827-9 Index number: 601-003-00-5	propane ⚠ Flam. Gas 1, H220; Press. Gas, H280	25-30%
CAS: 67-64-1 EINECS: 200-662-2 Index number: 606-001-00-8 Reg.nr.: 01-2119471330-49-xxxx	acetone ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	10-<25%
CAS: 141-78-6 EINECS: 205-500-4 Index number: 607-022-00-5 Reg.nr.: 01-2119475103-46	ethyl acetate ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	3-5%
CAS: 67-63-0 EINECS: 200-661-7 Index number: 603-117-00-0 Reg.nr.: 01-2119457558-25	propan-2-ol ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	1-<3%
CAS: 75-28-5 EINECS: 200-857-2 Index number: 601-004-00-0	isobutane ⚠ Flam. Gas 1, H220; Press. Gas, H280	1-1,5%

SECTION 4: First aid measures

- **4.1 Description of first aid measures**
- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Generally the product does not irritate the skin.
- **After eye contact:** Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing:** If symptoms persist consult doctor.
- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **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, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents:** Water with full jet
- **5.2 Special hazards arising from the substance or mixture** No further relevant information available.
- **5.3 Advice for firefighters**
- **Protective equipment:** No special measures required.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**
Do not allow product to reach sewage system or any water course.
Inform respective authorities in case of seepage into water course or sewage system.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.

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See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

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SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about fire - and explosion protection:** Keep ignition sources away - Do not smoke.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:**
Store in a cool location.
Observe official regulations on storing packagings with pressurised containers.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
Store in cool, dry conditions in well sealed receptacles.
Protect from heat and direct sunlight.
Recommended storage temperature: 10-30 °C.
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

8.1 Control parameters

- **Ingredients with limit values that require monitoring at the workplace:**

106-97-8 butane

AGW (Germany) Long-term value: 2400 mg/m³, 1000 ppm
4(II);DFG

74-98-6 propane

AGW (Germany) Long-term value: 1800 mg/m³, 1000 ppm
4(II);DFG

67-64-1 acetone

AGW (Germany) Long-term value: 1200 mg/m³, 500 ppm
2(I);DFG, EU

141-78-6 ethyl acetate

AGW (Germany) Long-term value: 1500 mg/m³, 400 ppm
2(I);DFG, Y

67-63-0 propan-2-ol

AGW (Germany) Long-term value: 500 mg/m³, 200 ppm
2(II);DFG, Y

75-28-5 isobutane

AGW (Germany) Long-term value: 2400 mg/m³, 1000 ppm
4(II);DFG

DNELs

67-64-1 acetone

Oral	DNEL	62 mg/kg/bw/day (human)
Dermal	DNEL	62 mg/kg bw/day (human)
Inhalative	DNEL	200 mg/m ³ (human)

141-78-6 ethyl acetate

Oral	DNEL	4,5 mg/kg/bw/day (population) (Long-term - systemic effects)
Dermal	DNEL	37 mg/kg bw/day (population) (Long-term - systemic effects) 63 mg/kg bw/day (worker) (Long-term - systemic effects)
Inhalative	DNEL	734 mg/m ³ (population) (Acute - systemic effects) 1468 mg/m ³ (worker) (Acute - systemic effects)
	DNEL	734 mg/m ³ (population) ((Acute - local effects))

PNECs

141-78-6 ethyl acetate

PNEC	650 mg/l (STP)
PNEC sediment	0,34 mg/kg dw (Bel) (freshwater)

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Ingredients with biological limit values:

67-64-1 acetone

BGW (Germany) 80 mg/l
 Untersuchungsmaterial: Urin
 Probenahmezeitpunkt: Expositionsende bzw. Schichtende
 Parameter: Aceton

67-63-0 propan-2-ol

BGW (Germany) 25 mg/l
 Untersuchungsmaterial: Vollblut
 Probenahmezeitpunkt: Expositionsende bzw. Schichtende
 Parameter: Aceton

25 mg/l
 Untersuchungsmaterial: Urin
 Probenahmezeitpunkt: Expositionsende bzw. Schichtende
 Parameter: Aceton

Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

Personal protective equipment:

General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

Avoid contact with the eyes.

Avoid contact with the eyes and skin.

Respiratory protection:

Not necessary if room is well-ventilated.

When used properly and under normal conditions, breathing protection is not required.

Protection of hands: Not required.

Material of gloves

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. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Penetration time of glove material

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

As protection from splashes gloves made of the following materials are suitable: PVC or PE gloves

Eye protection:



Tightly sealed goggles

Body protection: Light weight protective clothing

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

General Information

Appearance:

Form: Aerosol

Colour: Brown

Odour: Characteristic

Odour threshold: Not determined.

pH-value: Not applicable for an aerosol *

Change in condition

Melting point/Melting range: Undetermined.

Boiling point/Boiling range: Not applicable, as aerosol.

Flash point: Not applicable, as aerosol.

Flammability (solid, gaseous): Not applicable.

Ignition temperature: 365 °C

Decomposition temperature: Not determined.

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· Self-igniting:	Product is not selfigniting.
· Danger of explosion:	Protect from sunlight and temperatures above 50 °C. Development of explosive vapor / air mixtures.
· Explosion limits:	
Lower:	1,5 Vol %
Upper:	13,0 Vol %
· Vapour pressure at 20 °C:	4200 hPa
· Density at 20 °C:	0,613 g/cm ³
· Relative density	Not determined.
· Vapour density	Not determined.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with water:	Not miscible or difficult to mix.
· 9.2 Other information	* The final mixture in the aerosol is formed only after the addition of the pressurized gas. Some data are not measurable in a hermetically sealed, pressurized container.

SECTION 10: Stability and reactivity

- **10.1 Reactivity**
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity:**

LD/LC50 values relevant for classification:

67-64-1 acetone

Oral	LD50	5800 mg/kg (rat)
Dermal	LD50	20000 mg/kg (rabbit)
Inhalative	LC50/4 h	76 mg/l (rat)

141-78-6 ethyl acetate

Oral	LD50	5620 mg/kg (rabbit)
Dermal	LD50	> 18000 mg/kg (rabbit)
Inhalative	LC50/4 h	56 mg/l (rat)

67-63-0 propan-2-ol

Oral	LD50	4570 mg/kg (rat)
Dermal	LD50	13400 mg/kg (rabbit)
Inhalative	LC50/4 h	30 mg/l (rat)

87-66-1 pyrogallol

Oral	LD50	300 mg/kg (mouse)
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- **Primary irritant effect:**
 - **on the skin:** No irritant effect.
 - **on the eye:** Irritating effect.
 - **Sensitisation:** No sensitising effects known.
 - **Additional toxicological information:**
- The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:
- Irritant

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SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity:

74-98-6 propane

EC50 / 48h 27,1 mg/l (daphnia magna)

EC50 / 72h 11,9 mg/l (Algen)

LC50 / 96 h 49,9 mg/l (fish)

67-64-1 acetone

EC50 / 48h >100 mg/l (daphnia magna)

LC50 20,000 mg/l (rabbit)

LC50 / 96 h 7500 mg/l (Leuciscus idus (Aland))

5540 mg/l (Oncorhynchus mykiss (Regenbogenforelle))

LC50/48h 12600 mg/l (daphnia magna)

NOEC / 16h 1700 mg/l (Pseudomonas putida)

NOEC / 48h 4740 mg/l (Pseudokirchneriella subcapitata)

141-78-6 ethyl acetate

EC50 / 48h 717 mg/l (daphnia magna)

3300 mg/l (Scenedesmus subspicatus)

LC50 / 96 h 230 mg/l (Pimephales promelas)

NOEC 2,4 mg/l (daphnia magna) (21d; DIN 38412, Part 11)

NOEC / 72h > 100mg mg/l (Desmodesmus subspicatus) (OECD 201)

12.2 Persistence and degradability No further relevant information available.

12.3 Bioaccumulative potential No further relevant information available.

12.4 Mobility in soil No further relevant information available.

Additional ecological information:

General notes:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

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

Recommendation Must not be disposed together with household garbage. Do not allow product to reach sewage system.

European waste catalogue

16 05 04* gases in pressure containers (including halons) containing dangerous substances

15 01 11* metallic packaging containing a dangerous solid porous matrix (for example asbestos), including empty pressure containers

Uncleaned packaging:

Recommendation: Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

SECTION 14: Transport information

14.1 UN-Number

ADR, IMDG, IATA

UN1950

14.2 UN proper shipping name

ADR

1950 AEROSOLS

IMDG

AEROSOLS

IATA

AEROSOLS, flammable

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14.3 Transport hazard class(es)

ADR



· **Class** 2 5F Gases.
 · **Label** 2.1

IMDG, IATA



· **Class** 2.1
 · **Label** 2.1

14.4 Packing group

· **ADR, IMDG, IATA** Void

14.5 Environmental hazards:

· **Marine pollutant:** No

14.6 Special precautions for user

· **Warning:** Gases.
 · **Danger code (Kemler):** -
 · **EMS Number:** F-D,S-U

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

Not applicable.

Transport/Additional information:

ADR

· **Limited quantities (LQ)** 1L
 · **Excepted quantities (EQ)** Code: E0
 Not permitted as Excepted Quantity
 · **Transport category** 2
 · **Tunnel restriction code** D

IMDG

· **Limited quantities (LQ)** 1L
 · **Excepted quantities (EQ)** Code: E0
 Not permitted as Excepted Quantity

· **UN "Model Regulation":** UN1950, AEROSOLS, 2.1

SECTION 15: Regulatory information

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

No further relevant information available.

15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases

H220 Extremely flammable gas.
 H225 Highly flammable liquid and vapour.
 H280 Contains gas under pressure; may explode if heated.
 H319 Causes serious eye irritation.
 H336 May cause drowsiness or dizziness.

Abbreviations and acronyms:

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 Harmonised System of Classification and Labelling of Chemicals
 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)

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DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
Flam. Gas 1: Flammable gases, Hazard Category 1
Flam. Aerosol 1: Flammable aerosols, Hazard Category 1
Press. Gas: Gases under pressure: Compressed gas
Flam. Liq. 2: Flammable liquids, 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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