SECTION 1: Identification of the substance / preparation and of the company

1.1 Product identifier

"Opal" Schnellreiniger
Article number 2897311

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

1.2.1 Relevant uses

Cleaning agent

1.2.2 Uses advised against

None known.

1.3 Details of the supplier of the safety data sheet

Company Normfest GmbH

Siemensstraße 23
42551 Velbert / GERMANY
Phone +49 2051 275-0
Fax +49 2051 275-141
Homepage www.normfest.de
E-mail info@normfest.de

Address enquiries to

Technical information info@normfest.de

Safety Data Sheet sdb@chemiebuero.de

1.4 Emergency phone

Advisory body +49 (0) 89-19240 (24h) (english)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008 [CLP]

Hazard pictograms

Signal word DANGER

Flam. Aerosol 1 - H222 Extremely flammable aerosol.

Classification according to conversion table Annex VII 1272/2008/EC

2.1.2 Classification according to Regulation 67/548/EEC or 1999/45/EC

Hazard symbols

Extremely flammable

R-phrases R 12: Extremely flammable.

2.2 Label elements

Labelling according to Regulation 67/548/EEC or 1999/45/EC

Hazard symbols

Extremely flammable

R-phrases R 12: Extremely flammable.

S-phrases S 23.4: Do not breathe spray.
S 51: Use only in well-ventilated areas.

Special labelling Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C.
Do not pierce or burn, even after use.
Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking.
Keep out of the reach of children.

Cleaner, 648/2004/CE, contains: 5 - <15% hydrocarbons aliphatic/aromatic
5 - <15% aliphatic hydrocarbons (propellant)
< 5% non-ionic surfactants
fragrances

2.3 Other hazards

Physico-chemical hazards See section 10.

Human health dangers See section 11.

Environmental hazards The product/the substance has the Water Hazard Class 1.

Other hazards none

SECTION 3: Composition / Information on ingredients

3.1 Product-type:

The product in question is a mixture.

Range [%]	Substance
1 - <10	Propane/Butane
	CAS: 74-98-6/ 106-97-8, EINECS/ELINCS: 200-827-9/ 203-448-7, EU-INDEX: 601-003-00-5/ 601-004-00-0
	GHS/CLP: Flam. Aerosol 1 - H220
	EEC: F+, R 12
1 - <10	Hydrocarbons, C10-C12, isoalkanes, < 2% aromatics
	EINECS/ELINCS: 923-037-2, ECB-Nr.: 01-2119471991-29-XXXX
	GHS/CLP: Aquatic Chronic 4 - H413 - Asp. Tox 1 - H304 - - - EUH066 - Flam. Liq. 3 - H226
	EEC: Xn, R 10-65-66-53
1 - <10	1-Butoxypropan-2-ol
	CAS: 5131-66-8, EINECS/ELINCS: 225-878-4, EU-INDEX: 603-052-00-8
	GHS/CLP: Eye Irrit. 2 - H319 - Skin Irrit. 2 - H315
	EEC: Xi, R 36/38
0,1 - <1	Sodium nitrite
	CAS: 7632-00-0, EINECS/ELINCS: 231-555-9, EU-INDEX: 007-010-00-4
	GHS/CLP: Ox. Sol. 3 - H272 - Acute Tox. 3 - H301 - Aquatic Acute 1 - H400
	EEC: O-T-N, R 8-25-50

Comment on component parts Substances of Very High Concern - SVHC: substances are not contained or are below 0,1%.
For the wording of the listed risk phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information Change soaked clothing.

Inhalation Ensure supply of fresh air.
In the event of symptoms seek for medical treatment.

Skin contact When in contact with the skin, clean with soap and water.
Consult a doctor if skin irritation persists.

Eye contact In case of contact with eyes rinse thoroughly with plenty of water and seek medical advice.

Ingestion Do not induce vomiting.
In the event of symptoms seek for medical treatment.

4.2 Most important symptoms and effects, both acute and delayed

No informations available.

4.3 Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media Foam.
Dry powder.
Water spray jet.
Carbon dioxide.

Extinguishing media that must not be used Full water jet.

5.2 Special hazards arising from the substance or mixture

Unknown risk of formation of toxic pyrolysis products.
Bursting aerosols can be forcibly projected from a fire.

5.3 Advice for firefighters

Use self-contained breathing apparatus.

Fire residues and contaminated firefighting water must be disposed of in accordance within the local regulations.
Cool containers at risk with water spray jet.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Keep away from all sources of ignition.
Ensure adequate ventillation.
Use personal protective equipment (protective gloves, safety glasses, protective clothing).
High risk of slipping due to leakage/spillage of product.

6.2 Environmental precautions

Do not discharge leakages into the drains/surface waters/groundwater.

6.3 Methods and material for containment and cleaning up

Pick up with absorbent material (e.g. sand, sawdust, universal absorbent, diatomaceous earth).
Dispose of absorbed material in accordance within the regulations.

6.4 Reference to other sections

See section 8+13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Use only in well-ventilated areas.

Keep away from all sources of ignition - Refrain from smoking.
Vapours can form an explosive mixture with air.

7.2 Conditions for safe storage, including any incompatibilities

Provide solvent-resistant and impermeable floor.

Do not store together with oxidizing agents.

Keep in a cool place, heat causes increase in pressure and risk of bursting.
Keep container in a well-ventilated place.

7.3 Specific end use(s)

See product use, section 1.2

SECTION 8: Exposure controls / personal protection

8.1 Control parameters

Ingredients with occupational exposure limits to be monitored (GB)

Range [%]	Substance
1 - <10	Hydrocarbons, C10-C12, isoalkanes, < 2% aromatics
	EINECS/ELINCS: 923-037-2, ECB-Nr.: 01-2119471991-29-XXXX
	Long-term exposure: 1200 mg/m³
1 - <10	Propane/Butane
	CAS: 74-98-6/ 106-97-8, EINECS/ELINCS: 200-827-9/ 203-448-7, EU-INDEX: 601-003-00-5/ 601-004-00-0
	Long-term exposure: -/600 ppm, -/1450 mg/m³, Propane/Butane
	Short-term exposure (15-minute): -/750 ppm, -/1810 mg/m³

8.2 Exposure controls

Additional advice on system design
Ensure adequate ventilation on workstation.

Eye protection
Safety glasses.

Hand protection
Butyl rubber, >120 min (EN 374).
The details concerned are recommendations. Please contact the glove supplier for further information.

Skin protection
not applicable

Other
Avoid contact with eyes and skin.
Do not inhale gases/vapours/aerosols.
Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of these equipments to chemicals should be ascertained with the respective supplier.

Do not eat, drink, smoke or take drugs at work.
Wash hands before breaks and after work.
Use barrier skin cream.

Respiratory protection
Breathing apparatus in the event of high concentrations.
Short term: filter apparatus, filter A.

Thermal hazards
See section 7.

Delimitation and monitoring of the environmental exposition
not determined

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Form	aerosol
Color	colourless
Odor	characteristic
Odour threshold	not determined
pH-value	10,2
pH-value [1%]	not applicable
Boiling point [°C]	not applicable
Flash point [°C]	not applicable
Flammability [°C]	265
Lower explosion limit	not determined
Upper explosion limit	not determined
Oxidizing properties	no
Vapour pressure/gas pressure [kPa]	~4200 hPa
Density [g/ml]	0,974
Bulk density [kg/m³]	not applicable
Solubility in water	completely miscible
Partition coefficient [n-octanol/water]	not determined
Viscosity	not applicable
Relative vapour density determined in air	not applicable
Evaporation speed	not applicable
Melting point [°C]	not applicable
Autoignition temperature [°C]	not applicable
Decomposition temperature	not applicable

9.2 Other information

none

SECTION 10: Stability and reactivity

10.1 Reactivity

No dangerous reactions known if used as directed.

10.2 Chemical stability

Stable under normal ambient conditions (ambient temperature).

10.3 Possibility of hazardous reactions

Risk of bursting.
Evolution of flammable mixtures possible in air when heated above flash point and/or during spraying or misting.

10.4 Conditions to avoid

Strong heating.

10.5 Incompatible materials

No informations available.

10.6 Hazardous decomposition products

Flammable gases/vapours.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Range [%]	Substance
1 - <10	1-Butoxypropan-2-ol, CAS: 5131-66-8
	LD50, oral, Rat: > 2000 mg/kg.
	LD50, dermal, Rat: > 2000 mg/kg.
0,1 - <1	Sodium nitrite, CAS: 7632-00-0
	LD50, oral, Rat: 85 mg/kg.
	LC50, inhalative, Rat: 5,5 mg/l (4h).
1 - <10	Propane/Butane, CAS: 74-98-6/ 106-97-8
	LC50, inhalative, Rat: >800000 ppm IUCLID.
1 - <10	Hydrocarbons, C10-C12, isoalkanes, < 2% aromatics
	LC50, inhalative, Rat: >5000 mg/m³ (8h) (Lit.).
	LD50, oral, Rat: >5000 mg/kg bw (Lit.).
	LD50, dermal, Rabbit: >5000 mg/kg bw (Lit.).

Serious eye damage/irritation not determined

Skin corrosion/irritation not determined

Respiratory or skin sensitisation not determined

Specific target organ toxicity — single exposure not determined

Specific target organ toxicity — repeated exposure not determined

Mutagenicity not determined

Reproduction toxicity not determined

Carcinogenicity not determined

General remarks

Toxicological data of complete product are not available.
No classification on the basis of the calculation procedure of the preparation directive.
The toxicity data listed pertaining to the ingredients are intended for those working in the medicinal professions, experts for occupational health and safety and toxicologists. The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

SECTION 12: Ecological information

12.1 Toxicity

Range [%]	Substance
1 - <10	1-Butoxypropan-2-ol, CAS: 5131-66-8
	LC50, (96h), fish: 560 - 1000 mg/l (Lit.).
	LC50, (48h), Daphnia magna: > 1000 mg/l (Lit.).
0,1 - <1	Sodium nitrite, CAS: 7632-00-0
	EC50, (48h), Daphnia magna: 12,5-100 mg/l.
	LC50, (96h), Oncorhynchus mykiss: 0,09-0,13 mg/l (ECOTOX Database). M=10
1 - <10	Hydrocarbons, C10-C12, isoalkanes, < 2% aromatics
	LL0, (96h), Oncorhynchus mykiss: 1000 mg/L (Lit.).
	EL0, (48h), Daphnia magna: 1000 mg/L (Lit.).
	NOELR, (72h), Pseudokirchneriella subcapitata: 1000 mg/L (Lit.).

12.2 Persistence and degradability

Behaviour in environment compartments not determined

Behaviour in sewage plant not determined

Biological degradability The surfactants contained in this preparation comply with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents.
Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

12.3 Bioaccumulative potential

No informations available.

12.4 Mobility in soil

No informations available.

12.5 Results of PBT and vPvB assessment

No informations available.

12.6 Other adverse effects

Ecological data of complete product are not available.
No classification on the basis of the calculation procedure of the preparation directive.
The toxicity data pertaining to the ingredients were supplied by the manufacturers of raw materials.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Waste material must be disposed of in accordance with the Directive on waste 2008/98/EC as well as other national and local regulations. It is not possible to determine a waste code for this product in accordance with the European Waste Catalogue (EWC) since it is only possible to classify it according to how it is used by the customer. The waste code is to be determined within the EU in liaison with the waste-disposal operator.

Product

Dispose of as hazardous waste.

Waste no. (recommended) 160504* gases in pressure containers (including halons) containing dangerous substances

Contaminated packaging

Packaging that cannot be cleaned should be disposed of as for product.
Uncontaminated packaging may be taken for recycling.

Waste no. (recommended) 150110*

SECTION 14: Transport information

14.1 UN number

See section 14.2 in accordance with UN shipping name

14.2 UN proper shipping name

Transport by land according to ADR/RID	UN 1950 AEROSOLS 2.1
- Classification Code	5F
- Label	
- ADR LQ	1 l
- ADR 1.1.3.6 (8.6)	Transport category (tunnel restriction code) 2 (D)
Inland navigation (ADN)	UN 1950 AEROSOLS 2.1
- Classification Code	5F
- Label	
Marine transport in accordance with IMDG	UN 1950 Aerosols 2.1 -
- EMS	F-D, S-U
- Label	
- IMDG LQ	1 l
Air transport in accordance with IATA	UN 1950 Aerosols, flammable 2.1
- Label	

14.3 Transport hazard class(es)

See section 14.2 in accordance with UN shipping name

14.4 Packing group

See section 14.2 in accordance with UN shipping name

14.5 Environmental hazards

See section 14.2 in accordance with UN shipping name

14.6 Special precautions for user

Relevant information under section 6 to 8.

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

not applicable

SECTION 15: Regulatory information

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

EEC-REGULATIONS	1967/548 (1999/45); 1991/689 (2001/118); 1999/13; 2004/42; 648/2004; 1907/2006 (Reach); 1272/2008; 75/324/EEC (2008/47/EC); 453/2010/EC
TRANSPORT-REGULATIONS	DOT-Classification, ADR (2011); IMDG-Code (2011, 35. Amdt.); IATA-DGR (2012).
NATIONAL REGULATIONS (GB):	EH40/2005 Workplace exposure limits with amendments October 2007. CHIP 3/ CHIP 4

15.2 Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other informations

16.1 R-phrases (section 03)

R 12: Extremely flammable.
R 10: Flammable.
R 65: Harmful - may cause lung damage if swallowed.
R 66: Repeated exposure may cause skin dryness or cracking.
R 53: May cause long-term adverse effects in the aquatic environment.
R 36/38: Irritating to eyes and skin.
R 8: Contact with combustible material may cause fire.
R 25: Toxic if swallowed.
R 50: Very toxic to aquatic organisms.

16.2 Hazard statements (section 03)

H220 Extremely flammable gas.
H413 May cause long lasting harmful effects to aquatic life.
H304 May be fatal if swallowed and enters airways.
EUH066 Repeated exposure may cause skin dryness or cracking.
H226 Flammable liquid and vapour.
H319 Causes serious eye irritation.
H315 Causes skin irritation.
H272 May intensify fire; oxidiser.
H301 Toxic if swallowed.
H400 Very toxic to aquatic life.

16.3 Abbreviations and acronyms:

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
CAS = Chemical Abstracts Service
CLP = Classification, Labelling and Packaging
DMEL = Derived Minimum Effect Level
DNEL = Derived No Effect Level
EC50 = Median effective concentration
ECB = European Chemicals Bureau
EEC = European Economic Community
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
IC50 = Inhibition concentration, 50%
IMDG = International Maritime Code for Dangerous Goods
IUCLID = International Uniform ChemicaL Information Database
LC50 = Lethal concentration, 50%
LD50 = Median lethal dose
MARPOL = International Convention for the Prevention of Marine Pollution from Ships
PBT = Persistent, Bioaccumulative and Toxic substance
PNEC = Predicted No-Effect Concentration
REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals
TLV®/TWA = Threshold limit value – time-weighted average
TLV®STEL = Threshold limit value – short-time exposure limit
VOC = Volatile Organic Compounds
vPvB = very Persistent and very Bioaccumulative

16.4 Other informations

Observe employment restrictions for people	yes
VOC (1999/13/CE)	18 %
Modified position	none