

Metal Polish Unipol® 2102

Date of Issue: 12.08.2019 Revised: 12.08.2019

1. IDENTIFICATION OF THE SUBSTANCE/ PREPARATION AND OF THE COMPANY

1.1 Trade name: Metal Polish Unipol[®] 2102 D, Unipol 2102 T

relevant uses polishing agent

1.3 Details of the supplier of the safety data sheet

Company identification: OSBORN GmbH

Rudolf-Harbig-Weg 10 42781 Haan/Germany Tel.: +49 (0) 2129-9307-0 Fax: +49(0) 2129-9307-23 Homepage: www.osborn.de E-mail: polishing@osborn.de

adress enquires to

technical informationpolishing@osborn.desafety data sheetsschirpenbach@osborn.de

emergency telephone number

advisory body +49(0)30-30686700 (24h)

2. Hazards identification

2.1 Classification of substance or mixture

no classification

2.2 Label elements:

hazard pictogram

hazardous statements none

special labelling

special labelling: EUH210 safety data sheet available on request

2.3 other hazards

environmental hazards Does not contain any PBT of vBvB substances

other hazards further hazards were not determined with the current level of knowledge

3. Composition/ information on ingredients:

Product type: the product is a mixture

range Substance

9 -		
5-10 %	hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, <2% aromatics	
	CAS: 64742-47-8, EINECS/ELINCS: 920-107-4, Reg-No.: 01-2119453414-43-XXX GHS/CLP: Asp. Tox. 1: H304	
5-10 % hydrocarbons, C13-C15, iso-alkans, cyclics, < 2 % Aromatics		
	CAS: 64742-47-8, EINECS/ELINCS: 918-973-3, Reg-No.: 01-2119458871-30-XXXX GHS/CLP: Asp. Tox. 1: H304	



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5-10 % hydrocarbons, C13-C15, n-alkanes, isoalkanes, cyclics, <2% aromatics CAS: 64742-47-8, EINECS/ELINCS: 917-488-4, Reg-No.: 01-2119485032-45-XXXX GHS/CLP: Asp. Tox. 1: H304 1-5 % hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics CAS: 64742-47-8, EINECS/ELINCS: 926-141-6, EU- Index: 649-422-00-2, eg-No.: 01- 2119456620-43-XXXX GHS/CLP: Asp. Tox. 1: H304 1-5 % hydrocarbons, C13-C15, n-alkanes, isoalkanes, cyclics, <2% aromatics CAS 64742-47-8 EINECS/ELINCS: 917-488-4 Reg No.: 01-2119458943-27-XXXX GHS/CLP: Asp. Tox. 1: H304 <1 % Ammonia solution CAS: 1336-21-6, EINECS/ELINCS: 215-647-6, EU-INDEX: 007-001-01-2, Reg-No.: 01-2119488876-14-XXXX GHS/CLP: Skin Corr. 1B:H314 - Aquastic acute 1:H400 - STOT SE 3: H 335, M = 1

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Comment of composition parts substances very high concern - SVHC: substances are not contained or are

below 0,1%

For full text of H - statements: see SECTION 16

4. FIRST AID MEASURES:

4.1 Description of first aid measures

General information Take off contaminated clothing and wash before reuse.

Inhalation Ensure supply of fresh air.

In the event of symptoms seek medical treatment.

skin contact When in contact with the skin, clean with soap and water.

Consult a doctor if irritation persists.

eye contact Rinse cautiously with water for several minutes. Remove contact lenses,

if present and easy to do. Continue rinsing.

If eye irritation persists: Get medical advice/attention. Seek medical advice immediately. Do not induce vomitting

Rinse out mouth and give plenty water to drink

4.2 Most important symptons and effects, both acute and delayed

irritant effect

4.3 Indication of any immediate medial attention and special treatment needed

threated sympromatically

if swallowed or in the event of vormitting, risk of product entering the lungs

5. FIRE-FIGHTING MEASURES:

ingestion

5.1 Extinguishing media: Foam, dry powder, water spray jet, corbon dioxide

extinguishing media that

full water jet

must not used:

5.2 Special hazards arizing from the substance or mixture

risk of formation of toxic pyrolysis products

5.3 Advice for fire fighters

use self- contained breathing apparatus cool containers at risk with water spray jet



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first residues and contamination fire fighthing water must be disposed of in accordance within the local regulations

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6. ACCIDENTAL RELEASE MEASURES:

6.1 Personal precautions, protective equipment and emergency procedures

Ensure adequate exhaust ventilation. Keep away from all sources of ignition

high risk of slipping due to leakage/ spillage of product.

user personal protecting clothing

6.2 Environmental precautions: Do not discharge into drains/ surface waters/ groundwater.

6.3 Methodes for cleaning

up/taking up:

Take up mechanically, send in suitable containers for recovery or disposal.

dispose of absorbed material in accordance within the regulations

6.4 Reference to other sections See Section 8+13

7. HANDLING AND STORAGE

7.1 Precaution and safe handling

Use only in well-ventilated areas.

Provide suitable vacuuming at the processing area.

Keep only in original container.

Keep away from all sources of ignition.

After worktime and before work breaks the affected skin areas must be thoroughly

cleaned. Use barrier skin cream.

Do not eat, drink, smoke or take drugs at work.

Take off contaminated clothing and wash before reuse.

7.2 Condition for safe storage, including any incompabilities

Provide solvent-resistant and impermeable floor.

Prevent penetration into the ground.

Do not store together with oxidizing agents.

Do not store together with food and animal food/diet

Protect from heal/overheating.

Keep container in a well-ventilated place.

Keep container tightly closed.

7.3 Specific end use(s) see product use. SECTION 1.2

8. EXPOSURE CONTROLS/ PERSONAL PROTECTION:

8.1 control parameters

ingredients with occupational exposure limits to be monitored (GB)



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Substance				
hydrocarbons, C13-C15, n-alkanes, isoalkanes, cyclics, <2% aromatics				
CAS: 64742-47-8, EINECS/ELINCS: 917-488-5, Reg-No.: 01-2119485032-45-XXXX				
Long term exposure:600 mg/m³, AGS, 2.9 peak limit exceedance factor 2				
hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, <2% aromatics				
EINECS/ELINCS: 920-107-4, Reg-No.: 01-2119453414-43-XXXX				
Long term exposure: 600 mg/m³, AGS, 2,9 peak limit exceedance factor 2				
hydrocarbons, C13-C16, iso-alkans, cyclics, < 2 % Aromatics				
CAS: 64742-47-8, EINECS/ELINCS: 918-973-3, Reg-No.: 01-2119458871-30-XXXX				
Long term exposure: 600 mg/m³, AGS, 2,9 peak limit exceedance factor 2				
hydrocarbons, C13-C15, n-alkanes, isoalkanes, cyclics, <2% aromatics				
EINECS/ELINCS: 917-488-4 Reg No.: 01-2119458943-27-XXXX				
Long term exposure: 600 mg/m³, AGS, 2,9 peak limit exceedance factor 2				
hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics				
CAS: 64742-47-8, EINECS/ELINCS: 926-141-6, EU- INdex: 649-422-00-2, Reg-No.: 01- 2119456620-43-XXXX				
Long term exposure: 600 mg/m³, AGS, 2,9 peak limit exceedance factor 2				
Ammonia solution				
CAS: 1336-21-6, EINECS/ELINCS: 215-647-6, EU-INDEX: 007-001-01-2, Reg-No.: 01-2119488876-14-XXXX				
Long term exposure: 20 ppm, 14 mg/m³; DFG, EU, Y, for NH3				
peak limit exceedance factor: 40 ppm, 28 mg/m³, 2 (I)				
Aluminum oxide				
CAS 1344-28-1, EINECS/ ELINCS: 215-691-6, Reg-N.: 01-2119529248-35-XXXX				
Long term exposure: 10 mg/m³, inhalable dust (respirable dust: 4 mg/m³)				

ingredients with occupational exposure limits to be monitored (EU)

Substance/ EC LIMIT VALUES	
Ammonia solution	
CAS 1336-21-6, EINECS/ ELINCS: 215-647-6, EU-Index: 007-001-01-2, Reg. No.: 01-21194888876-14-XXXX	
Eight hours: 20 ppm, 14 mg/m³	

DNEL



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Ammonia solution

CAS 1336-21-6

Industrial, dermal, Lomg term-systemic effects: 6,8 mg/kg bw/day (NH3)

Industrial, inhalative, Acute-local effects: 36 mg/m³ (NH3)

Industrial, inhalative, long-term - local effects: 14 mg/m³ (NH3)

Industrial, inhalative, long-term - systemic effects: 47,6 mg/m³ (NH3)

Industrial, inhalative, Acute - systemic effects: 47,6 mg/m³ (NH3)

Industrial, dermal, Acute - systemic effects 6,8 mg/kg (NH3)

Industrial, oral, Acute- systemic effects 6,8 mg/kg bw/d (NH3)

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PNEC

Substance			
Ammonia solution CAS: 1336-21-6			
Seawater, 0,001 mg/l			
Freshwater, 0,001 mg/l			

8.2 Exposure controls

Additional advice on system

design

Ensure adequate ventilation on workstation. Measurement methods for taking workplace measurements must meet the performance of requirements of DIN EN 482. For example, recommendations are given in IFA's list of hazardous substances

Eye protection Safety glasses. (EN 166:2001)

Hand protection 0,7mm Butyl rubber, >120 min (EN 374-1/-2/-3).

The details concerned are recommendations. Please contact the glove supplier for

further information.

Skin protection Protective clothing (EN340)

other Do not inhale vapours.

Avoid contact with eyes and skin.

Personal protective equipment should be selected specifically for the working place, depending on concentration and quantity handled. The resistance of this equipment to chemicals should be ascertained with the respective supplier.

Respiratory protection Breathing apparatus in the event of high concentrations.

Short term: filter apparatus, combination filter A-P2. (DIN EN 14387)

thermal hazards none

Delimitation and monitoring the environmental

exposition

Protect the invironment by applying approciate control measures to prevent

or limit emissions



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9. PHYSICAL AND CHEMICAL PROPERTIES:

9.1 Information on basic physical and chemical properties

Form: pasty
Colour: blue

Odour: characteristic odour treshhold: not required pH-value: 9-10

pH-value [1%] not determined
Boiling Point: not determined
Flash Point [°C] > 93°C
Flammability (Solid gas) [°C] not applicable

Flammability (Solid, gas) [°C] not applicable lower exposure limit not determined upper exposure limit not determined

oxidising properties: no

Vapour Pressure/gas pressure[KPa] not determined Density [g/ml] 1,17 (20°C, 68°F) Bulk density [kg/m³] not applicable Solubility in water: partially miscible Partition coefficient [n-octanol/water] not determined > 20,5 mm²/s (40°C) relative vapour density determined in air not determined evaporation speed not determined Melting Point not applicable autoignition temperature [°C] not self-igniting decomposition temperature [°C] not determined

other information none

10. STABILITY AND REACTIVITY

10.1 Reactivity no dangerous reactions known if used as directed

10.2 Chemical stability The product is stable under standard conditions.

10.3 Possibility of hazardous

Reactions with oxidizing agents.

reactions Evol

Evolution of flammable mixtures possible in air when heated above flash

point and/or during spraying or misting.

10.4 Conditions to avoid Heating

10.5 Incompatible materials oxidizing agent

10.6 Hazardous decomposition No hazardous decomposition products known

products

11 TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

Product



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ATE-mix , inhalative (vapor), > 20 mg/l 4h

ATE-mix, dermal, > 2000 mg/kg

ATE- mix, oral, > 2000 mg/kg

Substance hydrocarbons, C13-C16, isoalkanes, cyclics, <2% aromatics CAS: 64742-47-8 LD50 dermal, rabbit: > 2000 mg/kg bw. LD50 oral, Rat: 5000 mg/kg bw. hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics LD50 dermal, Rat: > 5000 mg/kg (OECD 402) LD50 oral, Rat: >5000 mg/kg (OECD 401) LC50, inhalative, Rat: >5000 mg/m³ (8h) (OECD 403) hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, <2% aromatics LD50, dermal, Rabbit: > 5000 mg/kg (OECD 402) LD50, oral, Rat: > 5000 mg/kg (OECD 401) LC50, inhalative, Rat: >4951 mg/m³ (4h) (OECD 403) Ammonia solution CAS: 1336-21-6 LC50, inhalative, mouse: 91 mg/kg (NH3) LD50 oral, Rat: 350 mg/kg (NH3) LC50, inhalative, Rat: 2000 mg/l (NH3) LDLo, oral, Human: 43 mg/kg (NH3) hydrocarbons, C13-C15, n-alkanes, isoalkanes, cyclics, <2% aromatics LD50 oral, Rat: >15000 mg/kg (OECD 401) LD50 dermal, Rat: > 5000 mg/kg (OECD 402) LC50, inhalative, Rat: 25,3 mg/m3 (4h) (OECD 403)

Serious eye damage/irritation Does not contain any relevant substances fulfilling the classification criteria

Based on the available information, the classification criteria are not fulfilled.

Toxicological data of complete product are not available.

Skin corrosion/irritationDoes not contain any relevant substances fulfilling the classification criteria

Based on the available information, the classification criteria are not fulfilled.

Toxicological data of complete product are not available.

Respiratory or skin sensitisation Does not contain any relevant substances fulfilling the classification criteria

Based on the available information, the classification criteria are not fulfilled.

Toxicological data of complete product are not available.



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single exposure

Specific target organ toxicity — Does not contain any relevant substances fulfilling the classification criteria Based on the available information, the classification criteria are not fulfilled.

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Toxicological data of complete product are not available.

Specific target organ toxicity —

repeated exposure

Does not contain any relevant substances fulfilling the classification criteria Based on the available information, the classification criteria are not fulfilled.

Toxicological data of complete product are not available.

Does not contain any relevant substances fulfilling the classification criteria Mutagenicity

Based on the available information, the classification criteria are not fulfilled.

Toxicological data of complete product are not available.

Does not contain any relevant substances fulfilling the classification criteria Reproduction toxicity

Based on the available information, the classification criteria are not fulfilled.

Toxicological data of complete product are not available.

Does not contain any relevant substances fulfilling the classification criteria Carcinogenty

Based on the available information, the classification criteria are not fulfilled.

Toxicological data of complete product are not available.

12 ECOLOGICAL INFORMATION 12.1 Chronic toxicity

Substance		
hydrocarbons, C13-C16, iso-alkans, cyclics, < 2 % Aromatics		
50, (48h), Daphnia magna: >1000 mg/l (OECD 202)		
EL 50, (72h), Pseudokirchneriella subcapitata: > 1000 mg/l (OECD 201)		
LL50, (96h), Fish: > 87556 mg/l (OECD 203)		
hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, <2% aromatics		
EL0, (48h), Daphnia magna: 1000 mg/l		
EL0, (72h), Pseudokirchneriella subcapitata: > 1000 mg/l		
LL0, (96h), Oncorhynchus mykiss: 1000 mg/l		
hydrocarbons, C12-C15, n-alkanes, isoalkanes, cyclics, <2% aromatics		
EL0, (48h), Daphnia magna: 1000 mg/l (Lit)		
EL0, (72h), Pseudokirchneriella subcapitata: > 1000 mg/l (Lit)		
NOELR, (72h), Pseudokirchneriella subcapitata: 1000 mg/l (Lit)		
LL0, (96h), Oncorhynchus mykiss: 1000 mg/l (Lit)		
Ammonia solution CAS 1336-21-6		
LC50, (96h), Lepomis macrochirus: > 0,2 mg/l		
LC50, (96h) Daphnia magna, 0,101 mg/l (NH3)		
LC50, (96h) Fish 0,89 mg/l (NH3)		
LC50, (96h), Pimephales promelas: >0,7 mg/l		



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LC50, (96h), Salmo gairdineri: > 0,1 mg/l

LC50, (96h), Cyprinus carpio: 1,1 mg/l

LC50, (48h) Daphnia magna: 25,4 mg/l

LC50, (96h) Salmo gairdneri

hydrocarbons, C13-C15, n-alkanes, isoalkanes, cyclics, <2% aromatics

LC50, (96h), Oncorhynchus mykiss: > 1000 mg/l OECD 203

EC50, (48h), Daphnia magna: > 1000 mg/l OECD 202

EC50 (72h), Pseudokirchneriella subcapitata: > 1000 mg/l OECD 201

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12.2 Persistence and degradability

Behaviour in environment not determined

compartments

Behaviour in sewage plant not determined Biological degradability not determined

12.3 Bioaccumulative potential accumulation in organism is not expected

NOELR, (28d), Oncorhynchus mykiss: > 1000mg/l

NOELR. (21d), Daphnia magna: > 1000 mg/l

12.4 Mobility in soil Spillages may penetrate the soil causing ground water contamination

12.5 Results of PBT andBased on all available information not to be classified as PBT or vPvB respectively.

vPvB assessment

12.6 Other adverse effects none known

13. Disposal consideration

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.

Disposal in an incineration plant in accordance with the regulations of the local

authorities

Waste no. (recommended) 070601*

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*

150102

14. TRANSPORT INFORMATION

14.1 UN Number

Transport by land according to ADR/RID not applicable not applicable not applicable not applicable



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Marine transport in accordance with IMDG not applicable
Air transport in accordance with IATA not applicable

14.2 UN proper shipping name

Transport by land according to ADR/RID NO DANGEROUS GOODS

Inland navigation (ADN) NO DANGEROUS GOODS

Marine transport in accordance with IMDG NOT CLASSIFIED AS " NO DANGEROUS GOODS"

Air transport in accordance with IATA NOT CLASSIFIED AS " NO DANGEROUS GOODS"

14.3 Transport hazard class (es)

Transport by land according to ADR/RID not applicable

 Inland navigation (ADN)
 not applicable

 Marine transport in accordance with IMDG
 not applicable

 Air transport in accordance with IATA
 not applicable

14.4. Packaging group

Transport by land according to ADR/RID not applicable

Inland navigation (ADN) not applicable

Marine transport in accordance with IMDG not applicable
Air transport in accordance with IATA not applicable

14.5. Environmental hazards

Transport by land according to ADR/RID no Inland navigation (ADN) no

Inland navigation (ADN) no Marine transport in accordance with IMDG no

Air transport in accordance with IATA no

14.6 Special precaution for user

relevant information under SECTION 6 to 8

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

not applicable

15. regulary information

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

EEC-REGULATIONS 1991/689 (2001/118); 2010/75; 2004/42; 648/2004; 1907/2006 (REACH); 1272/2008;

75/324/EEC (2016/2037/EC); (EU) 2015/830; (EU)2016/131; (EU) 517/2014

TRANSPORT-REGULATIONS ADR (2019); IMDG-Code (2019, 39. Amdt.); IATA-DGR (2019).

NATIONAL REGULATIONS (GB): Workplace exposure limits (Second edition, published December 2011).

CHIP 3/ CHIP 4

- Observe employment restrictions no special measures necessary



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for people

- VOC (2004/42/EG) ~4%

15.2 chemical safety assessment not applicable

16. OTHER INFORMATIONES:

16.1 Hazard statements (section 03)

H335 May cause respiratory irritation.

H400 Very toxic to aquatic life.

H314 Causes severe skin burns and eye damage.

H 318 Cause serious eye damage

H304 May be fatal if swallowed and enters airways

16.2 Abbreviations and acrynoms

ADR = Accord europeen relatif au transport international des marchandises Dangereuses par Route

RID = Réglement concernant le transport international ferroviaire de marchandises dangereuses

ADN = Accord europeen relatif au transport international des marchandises dangereuses par voie de navigation interieure

ATE = acute toxicity estimate

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

ECB= European Chemical Bureau

EEC = European Economic Community

EINECS = European Inventory of Existing Commercial Chemical Substances

ELINCS = European List of Notified Chemical Substances

 $\hbox{GHS = Globally Harmonized System of Classification and Labelling of Chemicals}$

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 data base

LC50 = Lethal concentration, 50%

LD50 = Median lethal dose, 50%

LOAEL= lowest-observered-adverse-effect level

MARPOL = International Convention for the Prevention of Marine Pollution from Ships

NOAEL = No observed Adverse Effect level

NOEC = No observed Effect concentration

PBT = Persistent, Bioaccumulative and Toxic substance

PNEC = Predicted No-Effect concentration

REACH = Registration, Evaluation, Authorisation and Restriction of Chemicals

STP = Sewage Treatment Plan

TLV®/TWA = Threshold limit value- time-weighted average TLV®STEL = Threshold limit value- short-time exposure limit VOC =

Volatile Organic Compounds

VOC = Volatile organic compound

vPvB = very Persistent and very Bioaccumulative

16.3 Other information

Classification procedure aquatic Chronic 3: H412 Harmful to aquatic life with long lasting effects. ()

modified position Section 16 been added: General review

This document complements the technical instructions on usage, but does not substitute them. The information contained herein is based, to our best knowledge, on the technical information available on the product up to date. Users are advised that there is an inherent risk associated to the use of the product for differente purposes to those for which it is intended. This document does not exempt, in any way, the user of the product from the duty of fully understanding and applying all regulatory requirements. It is the sole



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responsability of the receiver of this document to adopt the necessary precautionary measures necessary for the use made of the product. All the information contained herein is provided, exclusively, with the aim of aiding the receiver to comply with his regulatory obligations with regard to the use of dangerous substances. The present list of information must not be considered as exhaustive, not exempting the receiver from adopting other precautions, which may described in documents not mentioned herein, regarding the storage and use of the product, of which the receiver is solely responsible.

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