MATERIAL SAFETY DATA SHEET

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

1.1. Product identifier

Trade name: **Sodium-Dispersion in Wax**

REACH registration No.: 01-2119484805-27-0002

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

Identified use: Chem. production, metallurgy, additive for aluminium casting, production of Polyamid12, conditioning and etching of fluorinated plastics, dehalogenation and desulfuration of mineral oil, as a reducing agent for chemical syntheses

uses advised against: any non-industrial and/or scientific related application

1.3. Details of the supplier of the safety data sheet

Supplier: Dr. Bilger Umweltconsulting GmbH
Gewerbepark Birkenhain 7a
D-63579 Freigericht
Telefon: +49-(0)6051-916695
e-Mail info@bilgergmbh.de

1.4. Emergency telephone number

Emergency telephone: Tel.: +49-(0)6051-91669-51
This number is only active during normal opening hours.

Emergency support **Information Munich: +49/ (0)89 19240**

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

Regulation (EG) No. 1272/2008,	
Hazard class/- category	**Hazard notes**
in contact with water releases flammable gases which may ignite spontaneously (category 1)	**H260**
Causes severe skin burns (subcategory 1B) and severe eye damage (category 1)	**H314**

2.2. Label elements



GHS02



GHS05

Signal word: DANGER

Hazard statements

H260	in contact with water releases flammable gases which may ignite spontaneously
H314	Causes severe skin burns and eye damage.

Precautionary statements:

Precautionary statements Precaution

P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.

Precautionary statements Response

P301+P330+P331	IF SWALLOWED: Rinse mouth. DO NOT induce vomiting
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continuous rinsing.
P370+P378	In case of fire: Use metal fire powder for extinction. NO WATER.
P308+P311	IF exposed or concerned: immediately call a POISON CENTER or doctor/physician.

Precautionary statements Storage:

P402+P404	Store in a dry place. Store in a closed container

Additional precautions

EUH014	reacts violently with water

2.3. Other hazards

Results of the PBT and vPvB assessment
According to the results of its assessment, this substance is neither a PBT nor a vPvB substance.

Endocrine disrupting properties
Does not contain an endocrine disruptor (ED) at a concentration of ≥ 0.1%.

SECTION 3. Composition/information on ingredients

3.1. Substance: Sodium Dispersion in Paraffin Wax

	Sodium (approx..33%)	Paraffin wax (approx..67%)
Formule	Na	
Mol. Weight:	22.98 g/mol	
CAS-No.:	7440-23-5	64742-51-4
EG-Nr.:	213-132-9	
EINECS:	231-132-9	265-154-5
Index-No.:	011-001-00-0	

3.2. Mixtures: not applicable:

SECTION 4. First aid measures



4.1. Description of First aid measures

General information: Remove contaminated clothing immediately. In case of health
Consult a doctor if health problems occur.

After inhalation: Move immediately to fresh air after inhalation of smoke produced by the reactions. If unconscious, keep on the side and seek medical advice. Remove to fresh air. Oxygen or artificial respiration if necessary. Call a doctor immediately.

After skin contact: Remove metal with spatula and then rinse with plenty of water.
In case of contact with liquid sodium, remove clothing immediately,
Remove sodium with dry cloth, wash with plenty of water,
consult a doctor.

After eye contact: Immediately remove metal carefully. Remove contact lenses. Then rinse thoroughly with
Rinse thoroughly with plenty of water until a doctor arrives.

After ingestion: Do NOT induce vomiting. Rinse out mouth. Give plenty of water to drink;
Consult a doctor immediately.

Notes for physician: Medical treatment according to alkali burn.
Show this safety data sheet to the doctor in attendance.

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

Symptoms: Ingestion may cause the following symptoms: Burning, Pain, Diarrhoea, Vomiting, Decreased blood pressure, Respiratory problems, Symptoms may be delayed.

Inhalation may cause the following symptoms: Irritating to respiratory system, altered lung function or difficulty breathing.

Skin contact may cause the following symptoms: Burn

Eye contact may cause the following symptoms: Burn

Health effects from repeated exposure may include: Irritation of the respiratory system.

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

Treatment: Delayed rupture or constriction of the gastrointestinal tract may occur after ingestion. Close monitoring is recommended.

SECTION 5. Firefighting measures

5.1. Extinguishing Media

Suitable: Dry soda ash, Extinguishing powder class D, dry salt, dry concrete

Unsuitable: Water, CO_2, extinguishing agents class A, B, C, E and foam

5.2. Special hazards arising from substance or mixture

Product releases hydrogen gas on contact with water.
Emits toxic fumes under fire conditions.

5.3. Advice for firefighters

Keep away from sources of ignition due to possible formation of hydrogen;
Do not inhale fumes under any circumstances; risk of chemical burns to mucous membranes,
Move people immediately to the side facing away from the wind
In case of fire, wear self-contained breathing apparatus against corrosive
oxide smoke. Wear full chemical protection suit.

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personel

Use appropriate protective equipment (including the personal protective equipment mentioned in section 8 of the
safety data sheet) to prevent contamination of skin, eyes and personal clothing.
Contamination of skin, eyes and personal clothing.
Avoid contact with skin, eyes and clothing.

6.1.2 For emergency responders:

Use personal protective equipment (such as Nomex). Avoid dust formation.
Avoid breathing dust. Ensure adequate ventilation.
Remove all sources of ignition. Evacuate personnel to safe areas.

6.2. Environmental precautions:

Prevent further leakage or spillage if safe to do so.
Do not let product enter drains. Risk of explosions

6.3. Methods and material for containment and clean-up

Cover drains
Pick up mechanically and arrange disposal without creating dust.
Do not flush with water. Keep in suitable, closed containers
for disposal.
Dispose of in suitable containers

6.4. Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. incompatible materials: see section 10. disposal information: see section 13.

SECTION 7. Handling and storage

7.1. Precautions for safe Handling

Open and handle container with care. Store sodium under paraffin oil, nitrogen or argon.
Protect from moisture-
Always keep containers tightly closed. The work area must be well ventilated. Wash hands before breaks and at the end of work. Keep away from food and drink. Do not smoke while working.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and containers:

dry, no sprinkler system, floor level raised compared to surroundings

Information on storage together:

Corresponding to storage class 4.3 (substances that form flammable gases on contact with water).
Observe storage prohibitions. Do not store together with highly flammable liquids

Further information on storage conditions

Recommended storage temperature: 10 -30° C

7.3. Specific end use(s) no information available

SECTION 8. Exposure controls/personal protection

8.1 Control parameters

Additional advices for design of technical equipment:
provide fire extinguisher metal class D
Risk of corrosion

Exposure limit values: Not applicable

8.2.1 Exposure controls

Personal Protection





General protection avoid any contact with eyes and skin.
No eating, drinking or smoking allowed
Keep workplace dry

Respiratory Protection: Normally there is no respiration protection necessary.
In exceptional case (at example: accidental release) it is necessary to wear respiration protection.

Hand Protection: nitrile covered cloves

Protective gloves must comply with the EC Directive 89/686/EEC and the related standards EN 374. Check density before use.
Recommended for example:
• Material: NBR (Nitril rubber)
• Thickness: > 0.11 mm.
• break through time: > 480 Minutes (Permeation level 6)
Take rest periods to regenerate the skin. Preventive skin protection (protective creams/ointments) is recommended**.**

Eye Protection: splash goggles, in exceptional cases it is necessary to wear a full length face shield

Body protection: Generally flame-retardant protective clothing.
Special protective clothing is required when working with large quantities of sodium; manufacturer's list available on request

Limiting and monitoring exposure:

Prevent from entering the sewage system or surface and ground water. groundwater. Explosion hazard.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

a)	**Physical state:**	solid in wax
b)	**Colour:**	silvery grey
c)	**Odour:**	odourless
d)	**Melting point (wax):**	approx..52 – 54 °C
	Melting point (Na):	97,8 °C
e)	**Boiling point**	892 °C
p)	**Density (20 °C)**	0,97 g/cm³

9.2. Other information none.

SECTION 10. Stability and reactivity

10.1. Reactivity see section 10.3

10.2. Chemical stability sensitive to moisture

10.3. Possibility of hazardous reactions

Explosion hazard and risk of ignition or formation of flammable gases or vapours with:
Water, alcohols, aluminium halides, ammonium compounds, metal salts, boron compounds, bromine, azides, halogenated hydrocarbons, organ. halogenides, chlorine, chlorates, chloroform, hydrogen chloride gas, chromium(VI) oxide, dichloromethane, ether, dimethylformamide, halogen oxides, ethanol, methanol, alkyl nitrates, nitrites, fluorine, halogens, hydrazines, hydrazine hydrate, hydroxylamine, iodine, halogen-halogen compounds, peroxides, activated carbon, carbon monoxide, copper compounds, metal oxides, organic nitro compounds, heavy metal salts, perchlorates, phosphorus halides, phosphorus oxides, silicon compounds, silver compounds, selenium, sulphur dioxide, carbon disulphide, hydrogen sulphide, sulphur, acid chlorides, oxygen, hydrochloric acid, nitric acid, mercury compounds, mercury, nitrogen dioxide

10.4. Conditions to avoid

Conditions to be avoided: High humidity, high temperature

10.5. Incompatible materials: see section 10.3

10.6. Hazardous decomposition products: see section 5

SECTION 11. Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

a) acute toxicity;	Mucous membrane irritation, cough, shortness of breath, Possible consequences: Damage to the respiratory tract
acute oral toxicity:	If swallowed, severe causticity of the mouth and throat and risk of perforation of the oesophagus and stomach.
b) skin corrosion/irritation;	Corrosive effect on skin and mucous membranes
c) serious eye damage/irritation;	Strong corrosive effect. Causes severe eye damage
d) respiratory or skin sensitisation;	no information available
e) germ cell mutagenicity;	no information available
f) carcinogenicity;	no information available
g) reproductive toxicity;	no information available
h) STOT-single exposure;	no information available
i) STOT-repeated exposure;	no information available
j) aspiration hazard:	no information available

11.2. Information on other hazards

11.2.1 Endocrine disrupting properties

Contains no endocrine disruptor (ED) in a concentration of ≥ 0.1%.

11.2.2 Other information

Decomposition of the substance with the moisture of the tissues. The usual precautionary measures for handling chemicals must be observed.

SECTION 12. Ecological information

12.1. Toxicity: No information available.
12.2. Persistence and degradability: No information available**.**
12.3. Bioaccumulative potential: No information available.
12.4. Mobility in soil: No information available.
12.5. Results of PBT and PBT/vPvB:
Not applicable for inorganic substances.

12.6. Endocrine disrupting properties
Contains no endocrine disruptor (ED) in a concentration of ≥ 0.1%.

12.7. Other adverse effects decomposition product reacting with water:
Sodium hydroxide
Entry into the environment must be avoided.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product	Call the supplier for technical advice in the individual case. Pick up the material and transfer in dry drum, close tightly and store in UN-x-coded transport drum. Sodium disposal must not be attempted by inexperienced people. Transport to incineration plant according to ADR-regulation No. 4.3; I
Large quantities	collect in steel drum and cover with dry oil.
Small quantities	pick up in a small steel bin, let react with Isopropanol, then add water in small quantities

Packaging

Steel Packaging	clean with isopropanol carefully if necessary and rinse with water before disposal. Do not drain into municipal water system.
Emptied packaging:	Household waste or to recycling companies
Other information	The six-digit waste code is used in accordance with AVV industry-, process-type-, origin- and material-specific, Dispose of in accordance with federal, state and local regulations. Observe Waste Directive 2008/98/EC.

SECTION 14: Transport information

14.1. UN number or ID number: UN1428

14.2. UN proper shipping name:

ADR/RID/ADN	NATRIUM
IMDG-Code	SODIUM
ICAO-TI	Sodium

14.3. Transport hazard class(es): 4.3

14.4. Packing group: **I**

14.5. Environmental hazards: Not hazardous to the environment according to dangerous goods regulations

14.6. Special precautions for user

14.7. Maritime transport in bulk according to IMO instruments

Not transported as bulk cargo.

Rail and Road ADR/RID/GGVSE:

ADR/RID-GGVS/E class:	4.3 (W2) Material that emits flammable gases on contact with water.
Kemler-Zahl:	X423
UN-NO:	1428
Packaging Group:	I
Lable:	4.3
Identification:	1428 Sodium
Limited quantity (LQ):	LQ0
Transport category:	1
Tunnel restriction code:	B/E



Sea IMDG/GGVSea:

IMDG/GGVSea-class:	4.3
UN-NO:	1428
Lable	4.3
Packaging Group:	I
Limited quantity (LQ):	LQ0
Identification:	SODIUM
EMS:	F-G S-N



Air ICAO-TI und IATA-DGR :

ICAO/IATA-class:	4.3
UN/ID-NO:	1428
Lable	4.3
Packaging Group:	I
Identification:	SODIUM
IATA (Passenger):	Transport forbidden
IATA (cargo plane):	Transport accepted
UN "Model Regulation ":	UN1428, Sodium, 4.3, I



SECTION 15: Regulatory information

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

- Seveso Directive

2012/18/EU (SevesoIII)				
No.	**Hazardous substance/hazard categories**	**Quantity threshold (in tonnes) for use in factory lower and upper classes**		**Note**
01	other hazards (EUH014)	100	500	58)
02	**other hazards (water react., cat. 1)**	100	500	59)

Note
58) Substances or mixtures with the hazard statement EUH014
59) Substances and mixtures which, in contact with water, emit flammable gases, hazard category 1

Occupational restrictions — Take note of Dir 94/33/EC on the protection of young people at Work

Regulation (EC) No 1006/2009 on substance that deplete the ozone layer:

not regulated

Regulation (EC) No 850/2004 of the European Parliament and of the Council of 29 April 2004 on persistent organic pollutants and amending Dir. 79/117/EEC:

not regulated

Substances of very high concern (SVHC):

This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (EACH), Article 57 above respective regulatory concentration limit of >/= 0.1 % (w/w).

15.2. Chemical safety assessment

No chemical safety assessment has been carried out for this product for quantities below 10 tons or more per year per registrant.

SECTION 16: Other information

a) Indication of where changes have been made to the previous version

Kap. 2.3 new design
Kap. 5.4 and 5.3 combined under 5.3
Kap. 5.5 deleted
Kap.7.2 title adjusted and text revised
Kap. 8.1 und 8.2 title adjusted and text revised
Kap. 9 adjusted to legislation 2020/8978/EU
Kap. 10.5 and 10.6 new
Kap. 11.2 Text revised
Kap. 12.6 and 12.7 revised
Section 14 Layout new
Kap. 15.1 Merkblatt M019 Natrium new in the list
Kap. 16b Legend to abbreviations inserted

b) Legend to abbreviations

ADR Accord relatif au transport international des marchandises dangereuses par route (Convention concerning the International Carriage of Dangerous Goods by Road)
IATA International Air Transport Association

IATA/DGR Dangerous Goods Regulations (DGR) for the air transport (IATA)

ICAO International Civil Aviation Organization

REACH Registration, Evaluation, Authorisation and Restriction of Chemicals

RID Règlement concernant le transport International ferroviaire des marchandises Dangereuses (Regulations concerning the International Carriage of Dangerous Goods by Rail)
PBT Persistent, Bioaccumulative and toxic

vPvB Very Persistent and very Bioaccumulative

c) Literature

Regulation (EC) No. 1272/2008 on classification, labelling and packaging of substances and mixtures.
Regulation (EC) No. 1907/2006 (REACH), amended by 2020/878/EU

e) Full text of H-statements referred to under sections 2 and 3.

Labelling

Hazard pictograms



Signal word Danger

Hazard statements

H260	in contact with water releases flammable gases which may ignite spontaneously
H314	Causes severe skin burns and eye damage
EUH014	Reacts violently with water

Precautionary statements

Prevention

P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response

P301+P330+P331	IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continuous rinsing.
P370+P378	In case of fire: Use metal fire powder for extinction. NO WATER.
P308+P311	IF exposed or concerned: immediately call a POISON CENTER or doctor/physician.

Storage

P402+P404	Store in a dry place. Store in a closed container

f) Training advice

Provide adequate information, instruction and training operators.

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.
The product must not be used for any purposes other than those specified under heading 1 without first obtaining written handling instructions.
It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.
The information given on this safety data sheet must be regarded as a description of the safety requirements relating to our product and not a guarantee of its properties

This information is taken from sources based upon data believed to be reliable.
However, Dr. Bilger Umweltconsulting GmbH makes no warranty as to the absolute correctness or sufficiency of any of the foregoing or that additional or other measures may not be required under particular conditions.
Local laws and regulations have to be considered by the customer upon own responsibility.