

according to UK REACH Regulation

Picric	Acid,	saturated	aqueous
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Revision date: 19.03.2024

Product code: 10339.xxxxx

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

1.1. Product identifier

Picric Acid, saturated aqueous

UFI:

9NMW-400N-P00W-YW33

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

Use of the substance/mixture

Use as laboratory reagent.

Uses advised against

Any non-intended use.

1.3. Details of the supplier of the safety data sheet

Company name:	MORPHISTO GmbH	
Street:	Schumannstr. 142/144	
Place:	D-63069 Offenbach	
Telephone:	+49 (0) 69 / 400 3019-60	Telefax: +49 (0) 69 / 400 3019-64
E-mail:	info@morphisto.de	
Contact person:	Morphisto GmbH	
E-mail:	gefahrstoffmanagement@morphisto.de	e
Internet:	http://www.morphisto.de	
1.4. Emergency telephone	Poison Information Center Mainz, Gerr	many, Tel: +49(0)6131/19240

number:

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

GB CLP Regulation

Skin Corr. 1; H314 Eye Dam. 1; H318

Full text of hazard statements: see SECTION 16.

The mixture was classified as corrosive precautionary due to an extreme pH-value.

2.2. Label elements

GΒ	CLP	Regulation
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Signal word:

Pictograms:



Hazard statements

H314

Causes severe skin burns and eye damage.

Precautionary statements

-	•••••••••••••••••••••••••••••••••••••••	
	P260	Do not breathe mist/vapours/spray.
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with
		water or shower.
	P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if
		present and easy to do. Continue rinsing.
	P310	Immediately call a POISON CENTER/doctor.



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2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulating and toxic (PBT) or very persistent and very bioaccumulating (vPvB) at levels of 0.1% or higher. Ecological information: The substance/mixture does not contain any components that are considered to be hazardous according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in amounts of 0.1 % or more have endocrine disrupting properties. Toxicological information: The substance/mixture does not contain any components that are to be classified according to REACH Article 57(f) or Commission Delegated Regulation (EU) 2017/2100 or Commission Delegated Regulation (EU) 2018/605 in guantities of 0.1 % or more have endocrine disrupting properties.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

aqueous solution

Relevant ingredients

CAS No	Chemical name	Chemical name		
	EC No	Index No	REACH No	
	Classification (GB CLP Reg	Classification (GB CLP Regulation)		
88-89-1	picric acid	picric acid		
	201-865-9	609-009-00-X		
	Expl. 1.1, Acute Tox. 3, Acute Tox. 3, Acute Tox. 3; H201 H331 H311 H301			

Full text of H and EUH statements: see section 16.

Specific Co	Specific Conc. Limits, M-factors and ATE				
CAS No	EC No	EC No Chemical name			
	Specific Conc	Specific Conc. Limits, M-factors and ATE			
88-89-1	201-865-9	picric acid	1 - < 5 %		
	inhalation: ATE = 3 mg/l (vapours); inhalation: LC50 = 0,51 mg/l (dusts or mists); dermal: LD50 = 300,1 mg/kg; oral: LD50 = 200 mg/kg				

Further Information

This product contains no substances of very high concern (SVHC) (>0.1%) which are included in the Candidate List according to Article 59 of REACH.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

First aider: Pay attention to self-protection! Remove affected person from the danger area and lay down. In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

After inhalation

Medical treatment necessary. Provide fresh air. Put victim at rest, cover with a blanket and keep warm. In case of breathing difficulties administer oxygen. In case of irregular breathing or respiratory arrest provide artificial respiration.

After contact with skin

After contact with skin, wash immediately with plenty of water and soap. Take off immediately all contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical advice/attention.

After contact with eves

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

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After ingestion

Observe risk of aspiration if vomiting occurs. Adverse human health effects and symptoms: Gastric perforation. Call a physician immediately. Do not allow a neutralisation agent to be drunk. Rinse mouth thoroughly with water. Let water be drunken in little sips (dilution effect). Do NOT induce vomiting.

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

No information available.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings. The product itself does not burn.

5.2. Special hazards arising from the substance or mixture

Non-flammable. In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO2). Nitrogen oxides (NOx).

5.3. Advice for firefighters

Wear a self-contained breathing apparatus and chemical protective clothing. Full protection suit.

Additional information

Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General advice

Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment. Provide adequate ventilation. Do not allow to dry. Risk of explosion in case of drying up. Wear personal protection equipment. (See section 8.)

6.2. Environmental precautions

Do not allow to enter into surface water or drains. Discharge into the environment must be avoided.

6.3. Methods and material for containment and cleaning up

For cleaning up

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents). Treat the recovered material as prescribed in the section on waste disposal.

Other information

Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Safe handling: see section 7 Personal protection equipment: see section 8 Disposal: see section 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Wear suitable protective clothing. (See section 8.)

Provide adequate ventilation as well as local exhaustion at critical locations.



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Use extractor hood (laboratory).

Advice on protection against fire and explosion

No special fire protection measures are necessary.

Advice on general occupational hygiene

Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff. Always close containers tightly after the removal of product. Used working clothes should not be worn outside the work area. Street clothing should be stored separately from work clothing.

Further information on handling

Conditions to avoid: Generation/formation of aerosols Always remove adhering product residues from lids and closures before closing the product.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep container tightly closed. Keep locked up. Store in a place accessible by authorized persons only. Provide adequate ventilation as well as local exhaustion at critical locations. Keep locked up. Recommended storage temperature: 15-25 °C Storage: Just as long as persons of Just as long a

Storage: Just as long as necessary. Unsuitable materials for Container: metal.

Hints on joint storage

Do not store together with: Food and fodder Explosive substances. Oxidizing substances. Infectious substances. Radioactive materials.

Further information on storage conditions

Keep away from heat. Protect from sunlight.

7.3. Specific end use(s)

No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

CAS No	Substance	ppm	mg/m³	fibres/ml	Category	Origin
88-89-1	Picric acid	-	0.1		TWA (8 h)	WEL
		-	0.3		STEL (15 min)	WEL

8.2. Exposure controls





Appropriate engineering controls

If handled uncovered, arrangements with local exhaust ventilation have to be used. Do not breathe gas/fumes/vapour/spray. Provide adequate ventilation as well as local exhaustion at critical locations. Use extractor hood (laboratory). refer to section 7. No further action is necessary.

Individual protection measures, such as personal protective equipment

Eye/face protection

Suitable eye protection: goggles. Tightly sealed safety glasses. EN 166

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is



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supplier of these gloves. Pull-over gloves of Suitable material: penetration time (maximum wearing period) CR (polychloroprenes, Chloroprene rubber). NBR (Nitrile rubber). (0,35 mm) FKM (fluororubber). (0,4 mm) PVC (Polyvinyl chloride). (0,5 mm) Butyl rubber. (0,5 mm)	>= 8h	
exceeding exposure limit values aerosol or mist generation. Insufficient ventilation. insufficient absorbtion. Suitable respiratory protective equipment: Combination filtering device (EN 14387) Typ The filter class must be suitable for the maxi that may arise when handling the product. If must be used.	atory protection. Respiratory protection necessary at:	
Environmental exposure controls Avoid release to the environment.		

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	liquid	
Colour:	yellow	
Odour:	characteristic	
Melting point/freezing point:		not determined
Boiling point or initial boiling point and		~100 °C
boiling range:		
Flammability:		not determined
Lower explosion limits:		not determined
Upper explosion limits:		not determined
Flash point:		not determined
Auto-ignition temperature:		not determined
Decomposition temperature:		not determined
pH-Value (at 20 °C):		1-2
Viscosity / kinematic:		not determined
Water solubility:		completely miscible
(at 20 °C)		
Solubility in other solvents		
not determined		
Partition coefficient n-octanol/water:		not determined
Vapour pressure:		23 hPa
(at 20 °C)		



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Density (at 20 °C):	1,01 g/cm³			
Relative vapour density:	not determined			
Particle characteristics:	not applicable			
9.2. Other information				
Information with regard to physical	hazard classes			
Explosive properties				
The product is not: Explosive. Explosive when dry.				
Oxidizing properties				
none				
Other safety characteristics				

not determined

Evaporation rate:

Further Information

No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No information available.

10.2. Chemical stability

Stable under normal storage and handling conditions.

10.3. Possibility of hazardous reactions

Exothermic reaction with: Base, Peroxides, Oxidizing agent. No information available.

10.4. Conditions to avoid

Keep away from heat. Do not allow to dry. Risk of explosion in case of drying up.

10.5. Incompatible materials

Keep away from: Base, Oxidizing agent, Peroxides. Reducing agent Oxidizing agents. Aluminium. Ammonia. Base. Heavy metal salts. fluorine. potassium.

10.6. Hazardous decomposition products

In case of fire may be liberated: Carbon monoxide Carbon dioxide (CO2). Nitrogen oxides (NOx).

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in GB CLP Regulation

Acute toxicity

Based on available data, the classification criteria are not met.

ATEmix calculated

ATE (oral) 14184 mg/kg; ATE (dermal) 21284 mg/kg; ATE (inhalation vapour) 212,8 mg/l; ATE (inhalation dust/mist) 36,17 mg/l

CAS No Chemical name

CASINO	Chemical hame						
	Exposure route	Dose		Species	Source	Method	
88-89-1	picric acid						
	oral	LD50 mg/kg	200	Rat	RTECS		
	dermal	LD50 mg/kg	300,1				
	inhalation vapour	ATE	3 mg/l				
	inhalation (4 h) dust/mist	LC50	0,51 mg/l				



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Irritation and corrosivity

Causes severe skin burns and eye damage. (On basis of test data) Causes serious eye damage. (On basis of test data)

Sensitising effects

Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction

Based on available data, the classification criteria are not met.

STOT-single exposure

Based on available data, the classification criteria are not met.

STOT-repeated exposure

Based on available data, the classification criteria are not met.

Aspiration hazard

Based on available data, the classification criteria are not met.

11.2. Information on other hazards

Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to humans as no components meets the criteria.

Other information

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity

Based on available data, the classification criteria are not met.

12.2. Persistence and degradability

The product has not been tested.

12.3. Bioaccumulative potential

The product has not been tested.

12.4. Mobility in soil

The product has not been tested.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to UK REACH.

12.6. Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

12.7. Other adverse effects

No information available.

Further information

Avoid release to the environment. Do not allow uncontrolled discharge of product into the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains. Dispose of waste according to applicable legislation. Consult the local waste disposal expert about waste disposal.

List of Wastes Code - residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste



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List of Wastes Code - used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals; hazardous waste

List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging

Wash with plenty of water. Completely emptied packages can be recycled. Non-contaminated packages may be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.				
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.				
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.				
<u>14.4. Packing group:</u>	No dangerous good in sense of this transport regulation.				
Inland waterways transport (ADN)					
14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.				
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.				
<u>14.3. Transport hazard class(es):</u>	No dangerous good in sense of this transport regulation.				
14.4. Packing group:	No dangerous good in sense of this transport regulation.				
Marine transport (IMDG)					
<u>14.1. UN number or ID number:</u>	No dangerous good in sense of this transport regulation.				
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.				
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.				
14.4. Packing group:	No dangerous good in sense of this transport regulation.				
Air transport (ICAO-TI/IATA-DGR)					
14.1. UN number or ID number:	No dangerous good in sense of this transport regulation.				
14.2. UN proper shipping name:	No dangerous good in sense of this transport regulation.				
14.3. Transport hazard class(es):	No dangerous good in sense of this transport regulation.				
14.4. Packing group:	No dangerous good in sense of this transport regulation.				
14.5. Environmental hazards					
ENVIRONMENTALLY HAZARDOUS:	No				
14.6. Special precautions for user					
Refer to section 6-8					
14.7. Maritime transport in bulk according to	IMO instruments				
not relevant					
SECTION 15: Regulatory information					
15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture					
EU regulatory information					
Restrictions on use (REACH, annex XVII):					
Entry 3, Entry 75					
Information according to Directive	Not subject to 2012/18/EU (SEVESO III)				



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Observe restrictions to employment for juveniles according to the 'juvenile

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work protection guideline' (94/33/EC).

1 - slightly hazardous to water

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This preparation is hazardous in the sense of regulation (EC) No 1272/2008 [GHS].

National regulatory information

Employment restrictions:

Water hazard class (D):

15.2. Chemical safety assessment

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

SECTION 16: Other information

Changes

This data sheet contains changes from the previous version in section(s): 2,3,4,6,7,8,9,10,11,12,14,15,16. Revision 2,0: Individual safety data sheet based on 10339_collect Rev. 2,1; 26.06.2023; general adjustment(s) Rev. 2,2; 18.09.2023; Change of transport labelling Rev. 2,3; 19.03.2024; general adjustment(s)



Re

Safety Data Sheet

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Abbreviations and acronyms			
Expl: Explosives			
Acute Tox: Acute toxicity			
Skin Corr: Skin corrosion			
Eye Dam: Eye damage			
ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agree concerning the	ent		
RID: Règlement international concernant le transport des marchandises dangereuses par chemin de	e fer		
(Regulations			
Concerning the International Transport of Dangerous Goods by Rail)			
IMDG: International Maritime Code for Dangerous Goods IATA: International Air Transport Association			
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)			
ICAO: International Civil Aviation Organization			
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)			
GHS: Globally Harmonized System of Classification and Labelling of Chemicals			
OSHA: Occupational Safety and Health Administration			
LC50: Lethal concentration, 50 percent			
LD50: Lethal dose, 50 percent			
NOAEL: No observed adverse effect level			
LOAEL: Lowest observed adverse effect level			
NOAEC: No observed adverse effect level			
LOAEC: Lowest observed adverse effect concentration DNEL: Derived No Effect Level			
PNEC: predicted no effect concentration			
TSCA: Toxic Substances Control Act			
IARC: INTERNATIONAL AGENCY FOR RESEARCH ON CANCER			
NTP: National Toxicology Program			
SARA: Superfund Amendments and Reauthorization Act			
GefStoffV: Gefahrstoffverordnung (Ordinance on Hazardous Substances, Germany)			
PBT: Persistent bioaccumulative toxic			
SVHC: substance of very high concern			
CLP: Classification, labelling and Packaging REACH: Registration, Evaluation and Authorization of Chemicals			
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals			
UN: United Nations			
CAS: Chemical Abstracts Service			
DNEL: Derived No Effect Level			
DMEL: Derived Minimal Effect Level			
PNEC: Predicted No Effect Concentration			
ATE: Acute toxicity estimate			
LL50: Lethal loading, 50% EL50: Effect loading, 50%			
EC50: Effective Concentration 50%			
ErC50: Effective Concentration 50%, growth rate			
NOEC: No Observed Effect Concentration			
BCF: Bio-concentration factor			
PBT: persistent, bioaccumulative, toxic			
vPvB: very persistent, very bioaccumulative			
ADR: Accord européen sur le transport des marchandises dangereuses par Route			
(European Agreement concerning the International Carriage of Dangerous Goods by Road)			
RID: Regulations concerning the international carriage of dangerous goods by rail	lataruava		
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland W (Accord européen relatif au transport international des marchandises dangereuses par voies de nav			
(Accord europeen relatif au transport international des marchandises dangeleuses par voies de hav	igation		

intérieures)



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EmS: Emergency Schedules MFAG: Medical First Aid Guide MARPOL: International Convention for the Prevention of Marine Pollution from Ships IBC: Intermediate Bulk Container For abbreviations and acronyms, see table at http://abbrev.esdscom.eu For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations). EC/EEC: European Community/European Economic Community EU: European Union M-factor: Multiplying factor IATA: International Air Transport Association DGR: Dangerous Goods Regulations ICAO: International Civil Aviation Organization

TI: Technical Instructions

Classification for mixtures and used evaluation method according to GB CLP Regulation

Classification	Classification procedure
Skin Corr. 1; H314	On basis of test data
Eye Dam. 1; H318	On basis of test data

Relevant H and EUH statements (number and full text)

H201	Explosive; mass explosion hazard.
H301	Toxic if swallowed.
H311	Toxic in contact with skin.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H331	Toxic if inhaled.

Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations. The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)