

Sodium cyanide

205222-500G

Version 1.4

Revision Date 17.12.2022

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

1.1. Product identifier

Product name : Sodium cyanide

SDS-number : 000000021194

Type of product : Substance

Remarks : SDS according to Art. 31 of Regulation (EC) 1907/2006.

Chemical name : Sodium cyanide

Index-No. : 006-007-00-5

REACH Registration Number : no data available

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

Use of the Substance/Mixture : Laboratory chemicals

Uses advised against : none

1.3. Details of the supplier of the safety data sheet

Company	: Honeywell Specialty Chemicals Seelze GmbH Wunstorfer Straße 40 30926 Seelze Germany	Honeywell International, Inc. 115 Tabor Road Morris Plains, NJ 07950-2546 USA
Telephone	: (49) 5137-999 0	
For further information, please contact:	: PMTEU Product Stewardship: SafetyDataSheet@Honeywell.com	

1.4. Emergency telephone number

Emergency telephone number : +1-703-527-3887 (ChemTrec-Transport)
+1-303-389-1414 (Medical)

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Country based Poison : see chapter 15.1
Control Center

SECTION 2: Hazards identification


2.1. Classification of the substance or mixture

REGULATION (EC) No 1272/2008

Corrosive to metals Category 1
H290 May be corrosive to metals.
Acute toxicity Category 1 - Oral
H330 Fatal if inhaled.
Acute toxicity Category 1 - Dermal
H310 Fatal in contact with skin.
Short-term (acute) aquatic hazard Category 1
H400 Very toxic to aquatic life.
Long-term (chronic) aquatic hazard Category 1
H410 Very toxic to aquatic life with long lasting effects.

2.2. Label elements

REGULATION (EC) No 1272/2008

Hazard pictograms : 

Signal word : Danger

Hazard statements : H290 May be corrosive to metals.
H300 + H310 + H330 Fatal if swallowed, in contact with skin or if inhaled.
H372 Causes damage to organs through prolonged or repeated exposure.
H410 Very toxic to aquatic life with long lasting effects.
EUH032 Contact with acids liberates very toxic gas.

Precautionary statements : P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.
P302 + P352 IF ON SKIN: Wash with plenty of water.
P406 Store in corrosive resistant container

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with a resistant inner liner.

2.3. Other hazards

Avoid exposure - obtain special instructions before use.

SECTION 3: Composition/information on ingredients

3.1. Substance

Chemical name	CAS-No. Index-No. REACH Registration Number EC-No.	Classification 1272/2008	Concentration	Remarks
Sodium cyanide	143-33-9 006-007-00-5 205-599-4		100 %	

3.2. Mixture

Not applicable

Occupational Exposure Limit(s), if available, are listed in Section 8.
For the full text of the H-Statements mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice:

First aider needs to protect himself. Call a physician immediately. Move out of dangerous area. Take off all contaminated clothing immediately.

Inhalation:

Call a physician immediately. If breathed in, move person into fresh air.

Skin contact:

After contact with skin, wash immediately with plenty of water. Call a physician immediately.

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Eye contact:

Protect unharmed eye. Rinse thoroughly with plenty of water, also under the eyelids. Call a physician immediately.

Ingestion:

Call a physician immediately. If victim is fully conscious, give a cupful of water. Never give anything by mouth to an unconscious person.

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

No data available

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

Treat as cyanide poisoning.

See Section 11 for more detailed information on health effects and symptoms.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:

Dry powder

Extinguishing media which shall not be used for safety reasons:

Water

Foam

Carbon dioxide (CO₂)

5.2. Special hazards arising from the substance or mixture

The product is not flammable.

In case of fire hazardous decomposition products may be produced such as:

Hydrogen cyanide (hydrocyanic acid)

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5.3. Advice for firefighters

Wear full protective clothing and self-contained breathing apparatus.
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Evacuate personnel to safe areas. Wear personal protective equipment. Keep people away from and upwind of spill/leak. Ensure adequate ventilation. Avoid dust formation. Do not breathe dust. Do not get in eyes, on skin, or on clothing.

6.2. Environmental precautions

Do not let product enter drains.

6.3. Methods and materials for containment and cleaning up

Use mechanical handling equipment.
Avoid dust formation.
Do not flush with water.
Do not let product enter drains.

6.4. Reference to other sections

For personal protection see section 8.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling:

Exhaust ventilation at the object is necessary. Avoid dust formation. Refill and handle product only in closed system. Wear personal protective equipment. Keep limited supplies at workplace. Plan first aid action before beginning work with this product. Avoid exposure - obtain special instructions before use. Never return unused material to storage receptacle.

Advice on protection against fire and explosion:

Normal measures for preventive fire protection.

Hygiene measures:

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Wash hands before breaks and immediately after handling the product. When using do not eat, drink or smoke.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers:

Store in original container. Keep containers tightly closed in a dry, cool and well-ventilated place. Keep locked up or in an area accessible only to qualified or authorised persons. Store away from incompatible substances. Keep away from food and drink.

Advice on common storage:

Do not store near acids.

7.3. Specific end use(s)

no additional data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits:

Components	Basis / Value type	Value / Form of exposure	Exceeding Factor	Remarks
Sodium cyanide	EH40 WEL SKIN_DES	as CN		Can be absorbed through the skin.
Sodium cyanide	EH40 WEL TWA	5 mg/m3 as CN		
Sodium cyanide	EU ELV SKIN_DES	as CN		Can be absorbed through the skin.
Sodium cyanide	EU ELV STEL	5 mg/m3 as CN		Indicative
Sodium cyanide	EU ELV TWA	1 mg/m3 as CN		Indicative

SKIN_DES - Skin designation:

TWA - Time weighted average

STEL - Short term exposure limit

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DNEL/ PNEC-Values

No DNEL-data available.

No PNEC data available.

8.2. Exposure controls

Occupational exposure controls

The Personal Protective Equipment must be in accordance with EN standards:respirator EN 136, 140, 149; safety glasses EN 166; protective suit: EN 340, 463, 468, 943-1, 943-2; gloves EN 374, 511; safety shoes EN-ISO 20345.

Avoid exposure - obtain special instructions before use.

Take off immediately all contaminated clothing.

Engineering measures

Use product only in closed system.

Perform filling operations only at stations with exhaust ventilation facilities.

Personal protective equipment

Respiratory protection:

In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection:

Glove material: Natural Latex

Break through time: > 480 min

Glove thickness: 0,6 mm

Lapren®706

Gloves must be inspected prior to use.

Replace when worn.

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Remarks: Supplementary note: The specifications are based on information and tests from similar substances by analogy.

Due to varying conditions (e.g.temperature or other strains) it must be considered that the usage of a chemical protective glove in practice may be much shorter than the permeation time determined in accordance with EN 374.

Since actual conditions of practical use often deviate from standardised conditions according EN 374 the glove manufacturer recommends to use the chemical protective glove in practice not longer than 50% of the recommended permeation time.

Manufacturer's directions for use should be observed because of great diversity of types .

Suitable gloves tested according EN 374 are supplied e.g. from KCL GmbH, D-36124 Eichenzell, Vertrieb@kcl.de

Eye protection:

Safety goggles

Skin and body protection:

Protective suit

Remove and wash contaminated clothing before re-use.

Environmental exposure controls

Handle in accordance with local environmental regulations and good industrial practices.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: solid
Colour	: colourless
Odour	: bitter almond
molecular weight	: 49,01 g/mol
Melting point/range	: 563 °C
Boiling point/boiling range	: 1.407 °C at 1.013 hPa
Flammability	: The product is not flammable.

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Upper explosion limit	:	Not applicable
Lower explosion limit	:	Not applicable
Flash point	:	Not applicable
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No decomposition if used as directed.
pH	:	11,0 - 12,0 at 20 °C
Viscosity, kinematic	:	No data available
Water solubility	:	583,0 g/l at 20 °C
Partition coefficient: n-octanol/water	:	No data available
Vapour pressure	:	No data available
Density	:	ca. 1,600 g/cm ³ at 20 °C
Bulk density	:	ca. 710 kg/m ³
Relative vapour density	:	No data available

9.2 Other Information

The product is hygroscopic.

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Corrosive to metals : Corrosive to metals

Evaporation rate : No data available

Viscosity, dynamic : Not applicable

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SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under recommended storage conditions.

10.2. Chemical stability

No decomposition if used as directed.

10.3. Possibility of hazardous reactions

Decomposes slowly on exposure to water.
Contact with acids liberates very toxic gas.

10.4. Conditions to avoid

Avoid dust formation.
Exposure to moisture

10.5. Incompatible materials

Acids
Strong oxidizing agents
Water

10.6. Hazardous decomposition products

Hydrogen cyanide (hydrocyanic acid)

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute oral toxicity:
Classification based on Annex VI of regulation 1272/2008/EC.

Acute dermal toxicity:
Classification based on Annex VI of regulation 1272/2008/EC.

Acute inhalation toxicity:

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Classification based on Annex VI of regulation 1272/2008/EC.

Skin irritation:

No data available

Eye irritation:

No data available

Respiratory or skin sensitisation:

No data available

Repeated dose toxicity:

Note: No data available

Carcinogenicity:

Note: No data available

Germ cell mutagenicity:

Note: No data available

Note: No data available

Aspiration hazard:

No data available

11.2. Information on other hazards

Endocrine disrupting properties

No data available

Other information:

No data available

SECTION 12: Ecological information

12.1. Toxicity

Toxicity to fish:

Classification based on Annex VI of regulation 1272/2008/EC.

Toxicity to aquatic plants:

Classification based on Annex VI of regulation 1272/2008/EC.

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Toxicity to aquatic invertebrates:

Classification based on Annex VI of regulation 1272/2008/EC.

12.2. Persistence and degradability

Biodegradability:

The methods for determining biodegradability are not applicable to inorganic substances.

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

No data available

12.6. Endocrine disrupting properties

No data available

12.7. Other adverse effects

Do not flush into surface water or sanitary sewer system.

If it is not neutralised, observe pH value.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product:

Dispose according to legal requirements.

Packaging:

Legal requirements are to be considered in regard of reuse or disposal of used packaging materials

Further information:

Provisions relating to waste:

EC Directive 2006/12/EC; 2008/98/EEC

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Regulation No. 1013/2006

For personal protection see section 8.

SECTION 14: Transport information

14.1 UN number

ADR/RID:1689

IMDG:1689

IATA:1689

14.2 UN proper shipping name

ADR/RID:SODIUM CYANIDE, SOLID

IMDG:SODIUM CYANIDE, SOLID

IATA:Sodium cyanide, solid

14.3 Transport hazard class(es)

ADR/RID: 6.1

IMDG: 6.1

IATA: 6.1

14.4 Packaging group

ADR/RID: I

IMDG: I

IATA: I

14.5 Environmental hazards

ADR/RID: yes

Marine pollutant: yes

14.6 Special precautions for user

IMDG Code segregation group (SG35) - Separate from acids (SGG1)

Incompatible with acids.

14.7 Maritime transport in bulk according to IMO instruments

No data available

SECTION 15: Regulatory information

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

Basis	Value	Remarks
Substances of very high concern (SVHC)		This product does not contain substances of very high concern according to Regulation (EC) No Article 57 above the respective regulatory 1907/2006 (REACH), concentration limit of $\geq 0.1\%$ (w/w).

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Poison Control Center

Country	Phone Number
Austria	+4314064343
Belgium	070 245245
Bulgaria	(+359)29154233
Croatia	(+3851)23-48-342
Cyprus	+357 2240 5611
Czech Republic	+420224919293; +420224915402
Denmark	82121212
Estonia	16662; (+372)6269390
Finland	9471977
France	+33(0)145425959
Greece	+30 210 779 3777
Hungary	(+36-80)201-199
Iceland	5432222
Ireland	+353(1)8092166
Italy	0382 24444
Germany	Berlin : 030/19240
	Bonn : 0228/19240
	Erfurt : 0361/730730
	Freiburg : 0761/19240
	Göttingen : 0551/19240
	Homburg : 06841/19240
	Mainz : 06131/19240
	Munich : 089/19240
Latvia	+37167042473

Country	Phone Number
Liechtenstein	+41 442515151
Lithuania	+370532362052
Luxembourg	070245245; (+352)80002-5500
Malta	+356 2395 2000
Netherlands	030-2748888
Norway	22591300
Poland	+48 42 25 38 400
Portugal	800250250
Romania	+40 21 318 3606
Slovakia (NTIC)	+421 2 54 774 166
Slovenia	+386 1 400 6051
Spain	+34915620420
Sweden	112 (begär Giftinformation); +46104566786
Switzerland	145
United Kingdom	(+44) 844 892 0111

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Other inventory information

US. Toxic Substances Control Act
On TSCA Inventory

Australia. Inventory of Industrial Chemicals (AIIC), as amended
On the inventory, or in compliance with the inventory

Canada. Canadian Environmental Protection Act (CEPA). Domestic Substances List (DSL)
All components of this product are on the Canadian DSL

Japan. Kashin-Hou Law List
On the inventory, or in compliance with the inventory

Korea. Existing Chemicals Inventory (KECI)
On the inventory, or in compliance with the inventory

Philippines. Inventory of Chemicals and Chemical Substances (PICCS)
On the inventory, or in compliance with the inventory

China. Inventory of Existing Chemical Substances (IECSC)
On the inventory, or in compliance with the inventory

New Zealand. Inventory of Chemicals (NZIoC), as published by ERMA New Zealand
On the inventory, or in compliance with the inventory

Taiwan Chemical Substance Inventory (TCSI)
On the inventory, or in compliance with the inventory

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

Text of H-statements referred to under heading 3

Further information

All directives and regulations refer to amended versions.

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Vertical lines in the left hand margin indicate a relevant amendment from the previous version.

Abbreviations:

EC European Community
CAS Chemical Abstracts Service
DNEL Derived no effect level
PNEC Predicted no effect level
vPvB Very persistent and very bioaccumulative substance
PBT Persistent, bioaccumulative and toxic substance

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text. Final determination of suitability of any material is the sole responsibility of the user.

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