### **Safety Data Sheet**

# Density standard solution 1.2037g/mL@20°C

Version: V2.0.0.1

Report No.: BWZ7650-2016-MSDS-US

Creation Date: 2025/10/20

Revision Date: -



#### \*Prepared according to American OSHA HCS-2024 (29 CFR 1910.1200)

1	Identification
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### | Product identifier

Product Name	Density standard solution 1.2037g/mL@20°C
Cat No.	BWZ7650-2016
CAS No.	98-95-3
EC No.	202-716-0
Molecular Formula	C6H5NO2

### Recommended use of the product and restrictions on use

Relevant identified uses Ple		Please consult manufacturer.
	Uses advised against	Please consult manufacturer.

### Details of the supplier of the Safety Data Sheet

Name of the company	Weiyel Inc
Address of the company	Hedian Light Industrial Park, Chengguan Town, Shangcheng County, Xinyang
	City, Henan Province, China
Post code	465350
Telephone number	010-58103678
Fax number	010-84840368
E-mail address	info@weiyel.com

### | Emergency phone number

Emergency phone number	010-58103678

# 2 Hazard(s) identification

### Hazard classification according to 29 CFR 1910.1200

Flammable Liquids	Category 4
Acute Toxicity - Oral	Category 4
Acute Toxicity - Dermal	Category 3
Acute Toxicity - Inhalation	Category 3
Carcinogenicity	Category 2
Reproductive Toxicity	Category 1B
Specific target organ toxicity -	Category 1
repeated exposure	

#### Label elements



Signal word Dang

### Hazard statements

H227	Combustible liquid
H302	Harmful if swallowed
H311	Toxic in contact with skin
H331	Toxic if inhaled
H351	Suspected of causing cancer
H360	May damage fertility
H372	Causes damage to organs through prolonged or repeated exposure(blood)

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## | Precautionary statements

#### Prevention

P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P260	Do not breathe gas/mist/vapour/spray.
P264	Wash hands and other parts of the body (if related) thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P271	Use only outdoors or with adequate ventilation.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.

### Response

P321	Specific treatment (see related instructions on the label).		
P330	Rinse mouth.		
P302+P352	IF ON SKIN: Wash with plenty of water.		
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.		
P361+P364	Take off immediately all contaminated clothing and wash it before reuse.		
P370+P378	Small fire: dry chemical, CO <sub>2</sub> or alcohol-resistant foam; Large fire: alcohol-resistant foam; Fire involving tanks, rail tank cars or highway tanks: Fight fire from maximum distance or use unmanned master stream devices or monitor nozzles. Cool containers with flooding quantities of water until well after fire is out.		

### Storage

P403	Store in a well-ventilated place.
P405	Store locked up.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
<ul><li>Disposal</li></ul>	

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

### Other hazards

### | Hazard description

Physical and chemical hazards

Combustible liquids in case of flame and high fever.

#### Health hazards

Inhaled	Headache. Blue lips or finger nails. Blue skin. Dizziness. Nausea. Weakness. Confusion. Convulsions. Unconsciousness.		
Ingestion	(Further see Inhalation).		
Skin Contact	MAY BE ABSORBED! (Further see Inhalation).		
Eye	This product may cause temporary discomfort following direct contact with the		
	eye.		

Environmental hazards

Please refer to 12th chapter of SDS.

# 3 Composition/information on ingredients

### Substance/mixture

Substance

Not applicable.

Component	CAS No.	EC No.	Concentration (wt, %)
Nitrobenzene	98-95-3	202-716-0	99.5

## 4 First-aid measures

#### Description of first aid measures

•	
General advice	Immediate medical attention is required. Show this safety data sheet (SDS) to the doctor in attendance.
Eye contact	First rinse with plenty of water for several minutes (remove contact lenses if easily possible), then take to a doctor.
Skin contact	Remove contaminated clothes. Rinse and then wash skin with water and soap. Refer for medical attention.
Ingestion	Rinse mouth. Give a slurry of activated charcoal in water to drink. Rest. Refer for medical attention.
Inhalation	Fresh air, rest. Artificial respiration if indicated. Refer for medical attention.
Protecting of first-aiders	Ensure that medical personnel are aware of the substance involved. Take precautions to protect themselves and prevent spread of contamination.

### | Most important symptoms/effects, acute and delayed

Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.

### Indication of any immediate medical attention and special treatment needed

- 1 Treat symptomatically.
- 2 Symptoms may be delayed.
- 5 Fire-fighting measures

#### Extinguishing media

leakage in the restricted space.

Density standard solution 1.2037g/mL@20°C		Version: V2.0.0.1 Revision Date:			
Su	itable extinguishing media	alcohol-resistant foam; Fire invention fire from maximum distance or	or alcohol-resistant foam; Large fire: blving tanks, rail tank cars or highway tanks: Fighuse unmanned master stream devices or monito booding quantities of water until well after fire is ou		
Jnsu	itable extinguishing media	Use of water spray when fighting	ng fire may be inefficient.		
S	pecific hazards arising fro	m the substance or mixture			
1	Will form explosive mixtures	with air.			
2	Fire exposed containers may or vapour concentration.	vent contents through pressure	relief valves thereby increasing fire intensity and		
3	Vapours may travel to source	of ignition and flash back.			
4	Liquid and vapour are flamm				
5	May emit poisonous fumes o				
6	,	ombustion gases or vapor possil	ole in the event of fire.		
7	·	e explosively when heated or inv			
		and precautions for fire-fig			
1	· · ·		HA/NIOSH approved or equivalent) and full		
	protective gear.				
2	Fight fire from a safe distance, with adequate cover.				
3	Prevent fire extinguishing wa	er from contaminating surface v	vater or the ground water system.		
6	Accidental release me	easures			
Per		tive equipment and emerge	ncyprocedures		
1	Avoid breathing vapours and	contacting with skin and eye.			
2	Beware of vapours accumula	ting to form explosive concentra	tions.		
3	Vapours can accumulate in le	ow areas.			
4	Emergency personnel wear panti-static clothing. Wear che		preathing apparatus. Wear protective and		
5	Fully encapsulating, vapor pr	otective clothing should be worn	for spills and leaks with no fire.		
6	Do not touch or walk through	spilled material.			
7	Do not touch damaged conta	iners or spilled material unless v	vearing appropriate protective clothing.		
8	Use personal protective equi	oment,do not breathe gas/mist/v	apour/spray.		
9	Ensure adequate ventilation. discharges.	Remove all sources of ignition.	Take precautionary measures against static		
10		reas. Keep people away from a	nd upwind of spill/leak.		
Enν	rironmental precautions				
1	Prevent further leakage or sp	illage if safe to do so.			
2	Discharge into the environme	nt must be avoided.			
Me	thods and materials for co	ntainment and cleaning up			
1	It is recommended that emer wear anti-static clothing.	gency personnel wear positive p	ressure self-contained breathing apparatus and		
2	In case of small amount of spillage, use clean non sparking tools to collect absorption materials.				
3	In case of large amount of sp	illage, construct cofferdam or dig	g a hole to collect the spillage. Use foam cover to		

reduce evaporation. Water spray mist can reduce evaporation, but can not reduce the flammability of the

4	Collect absorbent material using a clean, non-sparking tool.
5	Cover with anti-solvent foam to reduce evaporation.
6	Cover with DRY earth, DRY sand or other non-combustible material followed with plastic sheet to minimize spreading or contact with rain.
7	Water spray reduces evaporation but does not reduce the flammability of spills in confined spaces.
8	Do not touch or cross spills.
9	It is recommended that emergency personnel wear positive pressure self-contained breathing apparatus and wear anti-virus suits.
10	Spray water disperses the vapor and dilutes the liquid spill.
11	Do not touch broken containers and spills before putting on appropriate protective clothing.
12	Cut off the source of the leak as much as possible.
13	Keep leaks in a ventilated place.
14	Absorb spilled material in dry sand or inert absorbent. In case of large amount of spillage, contain a spill by bunding.
15	Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.
16	Contain spillage, and then collect with an electrically protected vacuum cleaner or by wet-brushing and place in container.
17	Remove all sources of ignition. Use spark-proof tools and explosion-proof equipment.

# 7 Handling and storage

### | Precautions for safe handling

	<b>G</b>
1	Avoid inhalation of vapors.
2	Use only non-sparking tools.
3	To prevent fire caused by electrostatic discharge steam, equipment on all metal parts should be grounded.
4	Use explosion proof equipment.
5	Handling is performed in a well ventilated place.
6	Wear suitable protective equipment.
7	Avoid contact with skin and eyes.
8	Keep away from heat/sparks/open flames/ hot surfaces.

## Conditions for safe storage, including any incompatibilities

1	Keep containers tightly closed.
2	Keep containers in a dry, cool and well-ventilated place.
3	Keep away from heat/sparks/open flames/hot surfaces.

# 8 Exposure controls/personal protection

### | Control parameters

◆Occupational exposure limit values

Component	Country/Region	Limit value - Eight hours		Limit value - Short term	
		ppm	mg/m³	ppm	mg/m³
Nitrobenzene	Japan - JSOH(2024–202 5)	1	5	-	-
	Permissible exposure standards for	1	5	2	10

workers in the workplace				
Australia	1	5	-	-
Canada - Ontario	1	-	-	-
European Union	0.2	1	-	-
New Zealand	0.1	0.5	-	-

## | Engineering controls

1	Ensure adequate ventilation, especially in confined areas.
2	Ensure that eyewash stations and safety showers are close to the workstation location.
3	Use explosion-proof electrical/ventilating/lighting/equipment.
4	Set up emergency exit and necessary risk-elimination area.

### | Personal protection equipment

• • • • • • • • • • • • • • • • • • • •	
General requirement	
Eye protection	Must wear appropriate safety goggles.
Hand protection	Must wear anti static chemical protective gloves.
Respiratory protection	Must wear appropriate personal dust proof gas mask.
Skin and body protection	Must wear anti static chemical protective clothing and anti static shoes.

## 9 Physical and chemical properties and safety characteristics

### | Physical and chemical properties

color, etc.)	orless or pale yellow oily liquid
Odor No i	nformation available
Odor threshold No i	nformation available
pH 8.1 (	( 20°C, 1g/L, Calculated )
Melting point/freezing point(°C) 5	
Initial boiling point and boiling 211	
range(°C)	
Flash point(Closed cup,°C) 88	
Evaporation rate No i	nformation available
Flammability No i	nformation available
Upper/lower explosive Upper	er limit: 40; Lower limit: 1.8
limits[%(v/v)]	
Vapor pressure 20Pa	a ( 20°C )
Vapor density(Air = 1) 4.2	
Relative density(Water=1) 1.2	
Solubility 1.9 g	g/L ( 20 °C(pH=6.5) )
n-octanol/water partition 1.86	
coefficient	
Auto-ignition temperature(°C) 480	
Decomposition temperature(°C) > 35	50

# 10 Stability and reactivity

### | Stability and reactivity

Reactivity	Contact with incompatible substances can cause decomposition or other chemical reactions.
Chemical stability	Stable under proper operation and storage conditions.
Possibility of hazardous reactions Conditions to avoid	In contact with ammonia, strong inorganic alkalis, active metals, alkali carbonates, metal oxides or metal alkaoxides may result in an explosion.  Incompatible materials, heat, flame and spark.
Incompatible materials	Ammonia, strong inorganic alkalis, active metal, alkali metal carbonates, metal oxides, metal alkaoxides, and nitric acid.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

# 11 Toxicological information

### Acute toxicity

Component	LD <sub>50</sub> (oral)	LD <sub>50</sub> (dermal)	LC <sub>50</sub> (inhalation,4h)
Nitrobenzene	349mg/kg(Rat)	760mg/kg(Rabbit)	556ppmV(Rat)

### Carcinogenicity

Component	List of carcinogens by the IARC Monographs	Report on Carcinogens by NTP	OSHA Carcinogen List
Nitrobenzene	Category 2B	Category R	Not Listed

### Others

Nitrobenzene(Component)					
Skin corrosion/irritation	Based on available data, the classification criteria are not met				
Serious eye damage/irritation	Based on available data, the classification criteria are not met				
Skin sensitization	Based on available data, the classification criteria are not met				
Respiratory sensitization	Based on available data, the classification criteria are not met				
Reproductive toxicity	May damage fertility(Category 1B)				
STOT-repeated exposure	Causes damage to organs through prolonged or repeated exposure(blood)(Category 1)				
Aspiration hazard	Based on available data, the classification criteria are not met				
Germ cell mutagenicity	Based on available data, the classification criteria are not met				

# 12 Ecological information

### | Acute aquatic toxicity

Component	Fish	Crustaceans	Algae or other aquatic plants
Nitrobenzene	LC <sub>50</sub> : 92mg/L (96h)(Fish)	EC <sub>50</sub> : 35mg/L	ErC <sub>50</sub> : 23.8mg/L
		(48h)(Crustaceans)	(96h)(Algae)

### | Chronic aquatic toxicity

Chronic aquatic toxicity	No information available			
Persistence and degradability	у			
Persistence and degradability	No information available			
Bioaccumulative potential				
Bioaccumulative potential	No information available			

### | Mobility in soil

Component	log Koc	Remark
Nitrobenzene	2.07	

# 13 Disposal considerations

### | Disposal considerations

Waste chemicals	Before disposal should refer to the relevant national and local laws and			
	regulation. Recommend the use of incineration disposal.			
Contaminated packaging	Containers may still present chemical hazard when empty. Keep away from hot and ignition source of fire. Return to supplier for recycling if possible.			
Disposal recommendations	Refer to section waste chemicals and contaminated packaging.			

## 14 Transport information

### Label and Mark

Transporting Label





### IMDG-CODE

UN number	1992
UN proper shipping name	FLAMMABLE LIQUID, TOXIC, N.O.S.
Transport hazard class	3
Transport subsidiary hazard	6.1
class	
Packing group	П
Marine pollutant ( Yes or no )	No

### IATA-DGR

UN number	1992
UN proper shipping name	FLAMMABLE LIQUID, TOXIC, N.O.S.
Transport hazard class	3
Transport subsidiary hazard	6.1
class	
Packing group	п

### UN-ADR

UN number	1992

UN proper shipping name	FLAMMABLE LIQUID, TOXIC, N.O.S.
Transport hazard class	3
Transport subsidiary hazard	6.1
class	
Packing group	п

### Transport in bulk according to IMO instruments

◆ Transport in bulk according to Annex II of MARPOL and the IBC code

Not Available

◆ Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

Not Available

◆ Transport in bulk in accordance with the IGC Code

Not Available

#### Others

**Precautions for transport** 

Transit should be anti-exposure, rain, high temperature. Strictly prohibited shipping or transportation with acids, alkalis, oxidants, food and food additives etc. Shipment of the goods vehicle exhaust pipe must be equipped with fire retardant devices, prohibit using mechanical equipment and tools of which easy to produce sparks. Transit should be anti-exposure, anti-rain, anti-high temperature. Transportation used tank (tank) cars should be grounded chain, tank can be installed to reduce the partition hole static electricity shocks. Strictly prohibited shipping or transportation with oxidants, acids, food and food additives etc. When bulk transport, Prohibit the use of cement or wooden boats. Transport vehicles should be equipped with the appropriate variety and quantity of fire equipment and emergency equipment leakage during transport. Before transport, should be preceded by checking whether container integrity, sealing. The transport unit must be placarded and marked in accordance with relevant transporting requirements.

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## 15 Regulatory information

#### International chemical inventory

Component	Α	В	С	D	E	F	G	Н	I	J	K	L	M
Nitrobenzene	√	√	√	√	√	√	<b>√</b>	√	√	√	√	<b>V</b>	<b>√</b>

- [A] China Inventory of Existing Chemical Substances(IECSC)
- [B] European Inventory of Existing Commercial Chemical Substances (EC inventory)
- [C] United States Toxic Substances Control Act Inventory(TSCA)
- [D] Canadian Domestic Substances List(DSL)
- [E] New Zealand Inventory of Chemicals(NZIoC)
- [F] Philippines Inventory of Chemicals and Chemical Substances(PICCS)
- [G] Korea Existing Chemicals Inventory(KECL)
- [H] Australian. Inventory of Industrial Chemical (AIICS)
- [1] Japan Inventory of Existing & New Chemical Substances(ENCS)
- [J] Thailand Existing Chemicals Inventory(TECI)
- [K] Mexico National Inventory of Chemical Substances (INSQ)
- [L] Russia Inventory of Existing Substances (DRAFT)
- [M] Inventory of Existing Chemical Substances in Taiwan, China (TCSI)

#### List of Chemical Substances under International Conventions

Component	A	В	С
Nitrobenzene	×	×	×

- [A] The Montreal Protocol on Substances that Deplete the Ozone Layer
- [B] Stockholm Convention on Persistent Organic Pollutants (POPs)
- [C] Rotterdam Convention on the prior informed consent procedure for certain hazardous chemicals and pesticides in international trade

### US chemical inventory

Component	Α	В	С	D	E	F	G	Н
Nitrobenzene	<b>√</b>	√	√	√	<b>√</b>	√	<b>√</b>	√

- [A] US Clean Air Act (CAA)- Section 112, Hazardous Air Pollutants
- [B] US SARA 302- Extremely Hazardous Substance List
- [C] US CERCLA- Hazardous Substances List
- [D] US Massachusetts Right-to-Know Substance List
- [E] US New Jersey Right to Know Hazardous Substance List
- [F] US Pennsylvania Right to Know Hazardous Substance List
- [G] US New York City Right-to-Know Hazardous Substance List
- [H] US California Proposition 65 List

#### Note:

- " $\sqrt{}$ " Indicates that the substance included in the regulations.
- "x" No data or not included in the regulations.

## 16 Other information

#### Information on revision

Creation Date	2025/10/20
Revision Date	-
Reason for revision	-

#### Reference

- [1] IPCS: The International Chemical Safety Cards (ICSC), website: http://www.ilo.org/dyn/icsc/showcard.home.
- [2] IARC, website: http://www.iarc.fr/.
- [3] OECD: The Global Portal to Information on Chemical Substances, website: https://www.echemportal.org/echemportal/.
- [4] CAMEO Chemicals, website: http://cameochemicals.noaa.gov/search/simple.
- [5] NLM: ChemIDplus, website: http://chem.sis.nlm.nih.gov/chemidplus/chemidlite.jsp.
- [6] EPA: Integrated Risk Information System, website: http://cfpub.epa.gov/iris/.
- $[7] \qquad \text{U.S. Department of Transportation: ERG, website: http://www.phmsa.dot.gov/hazmat/library/erg.} \\$
- [8] Germany GESTIS-database on hazard substance, website: http://gestis-en.itrust.de/.

#### Abbreviations and acronyms

CAS	Chemical Abstracts Service	UN	The United Nations
PC-STEL	Short term exposure limit	OECD	Organization for Economic Co-operation and Development
PC-TWA	Time Weighted Average	IMDG- CODE	International Maritime Dangerous Goods CODE
MAC	Maximum Allowable Concentration	IARC	International Agency for Research on Cancer
DNEL	Derived No Effect Level	ICAO	International Civil Aviation Organization
PNEC	Predicted No Effect Concentration	IATA	International Air Transportation Association
NOEC	No Observed Effect Concentration	ACGIH	American Conference of Governmental Industrial Hygienists
LC <sub>50</sub>	Lethal Concentration 50%	NFPA	National Fire Protection Association
LD <sub>50</sub>	Lethal Dose 50%	NTP	National Toxicology Program
EC <sub>50</sub>	Effective Concentration 50%	PBT	Persistent, Bioaccumulative, Toxic
$EC_X$	Effective Concentration X%	vPvB	very Persistent, very Bioaccumulative
Pow	Partition coefficient Octanol: Water	CMR	Carcinogens, mutagens or substances toxic to reproduction

BCF	Bioconcentration factor	RPE	RespiratoryProtective Equipment
ED	Endocrine disruptor	HCS	Hazard Communication Standard

### Disclaimer

This Safety Data Sheet (SDS) was prepared according to OSHA HCS-2024. The data included was derived from international authoritative database and provided by the enterprise. Other information was based on the present state of our knowledge. We try to ensure the correctness of all information. However, due to the diversity of information sources and the limitations of our knowledge, this document is only for user's reference. Users should make their independent judgment of suitability of this information for their particular purposes. We do not assume responsibility for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product.

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