

Section 1: PRODUCT AND COMPANY IDENTIFICATION

Product name	8 Phthalates Mixture Standard Solution (each 100µg/ml Hexane Solution)
Product code	165-19931
CAS No	N/A

Manufacturer	Wako Pure Chemical Industries, Ltd. 1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan Phone: +81 (0)6-6203-3741 Fax: +81 (0)6-6201-5964
Supplier	Wako Pure Chemical Industries, Ltd. 1-2 Doshomachi 3-Chome, Chuo-ku, Osaka 540-8605, Japan Phone: +81 (0)6-6203-3741 Fax: +81 (0)6-6201-5964
Emergency telephone number	+81-6-6203-3741 / +81-3-3270-8571
Recommended uses and restrictions on use	For research purposes

Section 2: HAZARDS IDENTIFICATION

GHS classification

Classification of the substance or mixture

Flammable liquids	Category 2
Aspiration toxicity	Category 1
Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 2A
Reproductive Toxicity	Category 2
Specific target organ toxicity (single exposure)	Category 3
Category 3 Respiratory tract irritation, Narcotic effects	
Specific target organ toxicity (repeated exposure)	Category 1
Category 1 nervous system	
aquatic environment (acute hazard)	Category 2

Pictograms



Signal word

Danger

Hazard statements

H225 - Highly flammable liquid and vapor

- H315 - Causes skin irritation
 H319 - Causes serious eye irritation
 H361 - Suspected of damaging fertility or the unborn child
 H335 - May cause respiratory irritation
 H336 - May cause drowsiness or dizziness
 H304 - May be fatal if swallowed and enters airways
 H401 - Toxic to aquatic life
 H372 - Causes damage to the following organs through prolonged or repeated exposure: nervous system

Precautionary statements-(Prevention)

- Obtain special instructions before use
- Do not handle until all safety precautions have been read and understood
- Use personal protective equipment as required.
- Wash face, hands and any exposed skin thoroughly after handling
- Do not breathe dust/fume/gas/mist/vapors/spray
- Do not eat, drink or smoke when using this product
- Use only outdoors or in a well-ventilated area
- Avoid release to the environment
- Keep away from heat/sparks/open flames/hot surfaces. — No smoking
- Keep container tightly closed
- Ground/bond container and receiving equipment
- Use explosion-proof electrical/ventilating/lighting/equipment
- Use only non-sparking tools
- Take precautionary measures against static discharge
- Keep cool

Precautionary statements-(Response)

- IF exposed or concerned: Get medical advice/attention
- IF IN EYES: 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.
- If skin irritation occurs: Get medical advice/attention
- IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
- Wash contaminated clothing before reuse.
- IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician
- Do NOT induce vomiting.
- In case of fire: Use CO₂, dry chemical, or foam for extinction

Precautionary statements-(Storage)

- Store locked up.
- Store in a well-ventilated place. Keep container tightly closed

Precautionary statements-(Disposal)

- Dispose of contents/container to an approved waste disposal plant

Others

Other hazards Not available

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Single Substance or Mixture Mixture

Chemical Name	Weight-%	Molecular weight	ENCS	ISHL No.	CAS No
Hexane	99.89	86.18	(2)-6	N/A	110-54-3

Impurities and/or Additives : Not applicable

Section 4: FIRST AID MEASURES

Inhalation

Remove to fresh air. If symptoms persist, call a physician.

Skin contact

Wash off immediately with soap and plenty of water. If symptoms persist, call a physician.

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.

Ingestion

Rinse mouth. Never give anything by mouth to an unconscious person. Call a physician or poison control center immediately. Do not induce vomiting without medical advice.

Protection of first-aiders

Use personal protective equipment as required.

Section 5: FIRE FIGHTING MEASURES

Suitable extinguishing media

Water spray (fog), carbon dioxide (CO₂), Foam, Extinguishing powder, Sand

Unsuitable extinguishing media

No information available

Special extinguishing method

No information available

Specific hazards arising from the chemical product

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Protection of fire-fighters

Use personal protective equipment as required. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

Section 6: ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipments to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

Environmental precautions

To be careful not discharged to the environment without being properly handled waste water contaminated.

Methods and materials for contaminant and methods and materials for cleaning up

Absorb dry sand, earth, sawdust and the waste. Collect empty container that can be sealed.

Recovery, neutralization

No information available

Secondary disaster prevention measures

Clean contaminated objects and areas thoroughly observing environmental regulations.

Section 7: HANDLING AND STORAGE

Handling**Technical measures**

Highly flammable. Avoid contact with high temperature objects, spark, and strong oxidizing agents. To cut with care and wear protective gloves and protective goggles to ampoule time of the opening. (Cutting method to check the label) Use with local exhaust ventilation.

Precautions

Do not rough handling containers, such as upsetting, falling, giving a shock, and dragging. Prevent leakage, overflow, and scattering. Not to generate steam and dust in vain. Seal the container after use. After handling, wash hands and face, and then gargle. In places other than those specified, should not be smoking or eating and drinking. Should not be brought contaminated protective equipment and gloves to rest stops. Deny unnecessary entry of non-emergency personnel to the handling area.

Safety handling precautions

Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapors). Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

Storage**Safe storage conditions****Storage conditions**

Keep container protect from light tightly closed. Store in a cool (2-10 degree C) place. Packed with an inert gas.

Safe packaging material

Ampoule

Incompatible substances

Strong oxidizing agents

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls

In case of indoor workplace, seal the source or use a local exhaust system. Provide the safety shower facility, and hand- and eye-wash facility. And display their position clearly.

Exposure limits

Chemical Name	Japan	ISHL Working Environmental Evaluation Standards - Administrative Control Levels	ACGIH
Hexane 110-54-3	40ppm, 140mg/m ³ ; skin	ISHL/ACL: 40 ppm	TWA: 50 ppm Skin

Personal protective equipment**Respiratory protection**

Protective mask

Hand protection

Protection gloves

Eye protection

protective eyeglasses or chemical safety goggles

Skin and body protection

Long-sleeved work clothes

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice.

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Form**Color**

colorless

Turbidity

clear

Appearance

liquid

Odor

characteristic odor

pH

No data available

Melting point/freezing point

-95.3 °C

Boiling point, initial boiling point and boiling range

69 °C

Flash point

-21.7 °C

Evaporation rate:

No data available

Flammability (solid, gas):

No data available

Upper/lower flammability or explosive limits**Upper :**

7.5vol%

Lower :

1.1vol%

Vapour pressure

20.6kPa

Vapour density

2.99(Air=1)

Specific Gravity (relative density)

0.678

Solubilities

hexane , Ethanol : at the rate of any miscible . water : practically insoluble,or insoluble .

n-Octanol/water partition coefficient:(log Pow)

No data available

Auto-ignition temperature:

260 °C

Decomposition temperature:

No data available

Viscosity (coefficient of viscosity)

No data available

Dynamic viscosity

No data available

Section 10: STABILITY AND REACTIVITY

Stability

Stability
Reactivity

May be altered by light.
No data available

Hazardous reactions

None under normal processing

Conditions to avoid

Extremes of temperature and direct sunlight, Heat, flames and sparks

Incompatible materials

Strong oxidizing agents

Hazardous decomposition products

Carbon monoxide (CO), carbon dioxide (CO₂)

Section 11: TOXICOLOGICAL INFORMATION

Acute toxicity

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Hexane	N/A	3000 mg/kg (Rabbit)	48000 ppm (Rat) 4 h

Component	Acute toxicity -oral- source information	Based on the NITE GHS classification results.	Acute toxicity -inhalation gas-source information
Hexane 110-54-3 (99.89)	LD50(oral,rat):15800, 28700, 32400mg/kg [EHC122(1991)]	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.

Component	Acute toxicity -inhalation vapor-source information	Acute toxicity -inhalation dust-source information	Acute toxicity -inhalation mist-source information
Hexane 110-54-3 (99.89)	LC50(ihl,rat):48000ppm/4h [Ministry of the Environment Risk Assessment vol1(2002)] , LC50(ihl,rat):74000ppm/4h [EHC122(1991)] .	Based on the NITE GHS classification results.	Based on the NITE GHS classification results.

Skin irritation/corrosion

Component	Skin corrosion irritation source information
Hexane 110-54-3 (99.89)	Based on the NITE GHS classification results.

Serious eye damage/ irritation

Component	Serious eye damage source information
Hexane 110-54-3 (99.89)	Based on the NITE GHS classification results.

Respiratory or skin sensitization

Component	Respiratory, Skin sensitization source information
Hexane 110-54-3 (99.89)	Based on the NITE GHS classification results.

Reproductive cell mutagenicity

No data available

Carcinogenicity

Component	Carcinogenicity source information
Hexane 110-54-3 (99.89)	Based on the NITE GHS classification results.

Reproductive toxicity

Component	Reproductive toxicity source information
Hexane 110-54-3 (99.89)	Based on the NITE GHS classification results.

STOT-single exposure

Component	STOT -single exposure- source information
Hexane 110-54-3 (99.89)	Based on the NITE GHS classification results.

STOT-repeated exposure

Component	STOT -repeated exposure- source information
Hexane 110-54-3 (99.89)	Based on the NITE GHS classification results.

Aspiration hazard

Component	Aspiration Hazard source information
Hexane 110-54-3 (99.89)	Based on the NITE GHS classification results.

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae/aquatic plants	Fish	Crustacea
Hexane	N/A	LC50: <i>Pimephales promelas</i> 2.1 - 2.98 mg/L 96 h	N/A

Other data

Component	Aquatic toxicity -Acute- source information	Aquatic toxicity -Chronic- source information
Hexane 110-54-3 (99.89)	EC50 (<i>Daphnia magna</i>):3.88mg/L/48h(EHC122,1991).	Based on the NITE GHS classification results.

Persistence and degradability	No information available
Bioaccumulative potential	No information available
Mobility in soil	No information available
Hazard to the ozone layer	No information available

Section 13: DISPOSAL CONSIDERATIONS

Waste from residues

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated container and contaminated packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Section 14: TRANSPORT INFORMATION

ADR/RID

UN number	UN1208
Proper shipping name:	Hexanes
UN classification	3
Subsidiary hazard class	
Packing group	II
ERG Code	3H
Marine pollutant	Yes

IMDG

UN number	UN1208
Proper shipping name:	Hexanes
UN classification	3
Subsidiary hazard class	
Packing group	II
EmS-No	F-E, S-D
Marine pollutant (Sea)	Yes

IATA

UN number	UN1208
Proper shipping name:	Hexanes
UN classification	3

Subsidiary hazard class	II
Packing group	II
Environmentally Hazardous Substance	Yes

Section 15: REGULATORY INFORMATION

International Inventories

EINECS/ELINCS	Listed
TSCA	Listed

Japanese regulations

Fire Service Act	Category IV, Class I petroleums, dangerous grade 2
Poisonous and Deleterious Substances Control Law	Not applicable
Industrial Safety and Health Act	Harmful Substances Whose Names Are to be Indicated on the Label (Law Art.57, Para.1, Enforcement Order Art.18) Notifiable Substances (Law Art.57-2, Enforcement Order Art.18-2 Attached Table No.9)No.520 Class 2 Organic Solvents (Enforcement Order Attached Table No.6-2, Ordinance on Prevention of Organic Solvent Poisoning Art.1, Para.1, Item 5) Working Environment Evaluation Standards, Administrative Control Levels (Law Art.65-2, Para.1) Dangerous Substances - Flammable Substance (Enforcement Order Attached Table 1 Item 4)
Act on the Evaluation of Chemical Substances and Regulation of Their Manufacture, etc	Priority Assessment Chemical Substances (Law Article 2, Para.5)
Regulations for the carriage and storage of dangerous goods in ship	Flammable Liquids (Ordinance Art.3, Ministry of Transportation Ordinance Regarding Transport by Ship and Storage, Attached Table 1)
Civil Aeronautics Law	Flammable Liquids (Ordinance Art.194, MITL Notification for Air Transportation of Explosives etc., Attached Table 1)
Marine Pollution Prevention Law	
Pollutant Release and Transfer Register Law	Class 1
Class 1 - No.	392
Export Trade Control Order	Not applicable
Air Pollution Control Law	Hazardous Air Pollutants

Section 16: OTHER INFORMATION

Literature and references

Revision Note	No information available
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Disclaimer

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, 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.

GHS Classification is according to JIS Z7252(2010). *JIS: Japanese Industrial Standards

End of Safety Data Sheet