



## Jubithione NaPT 40

### Safety Data Sheet

According to the federal final rule of hazard communication revised on 2012 (HazCom 2012)

Date of Compilation : April 13, 2012

Date of Revision : April 04, 2024

Revision due date : March 2027

Revision Number : 08

Version Name : 0676Gj Ghs08 Div.3 sds Jubithione NaPT 40.

Supersedes date : July 05, 2022

Supersedes version : 0676Gj Ghs07 Div.3 sds Sodium Pyrithione 40%Aq. Soln



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#### SECTION 1: Identification

##### 1.1. Identification

Product name : Jubithione NaPT 40  
Other Name : Sodium pyrithione (40% Aqueous solution)  
CAS RN : 3811-73-2 (active)  
EC# : 223-296-5 (active)  
Molecular formula : C<sub>5</sub>H<sub>4</sub>NNaOS

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

- Jubithione NaPT 40 is an effective antimicrobial agent that has been used for many years to protect water-based products and other applications. Examples include metalworking fluids, architectural paints, aqueous emulsion systems; textiles, plastics, flooring, wallboard and various construction products such as adhesives, caulks, components of insulation, flooring, etc.

##### 1.3. Details of the supplier of the safety data sheet

###### Jubilant Ingrevia Limited

**FACTORY & REGISTERED OFFICE:** Jubilant Ingrevia Limited, Bhartiagram, Gajraula, District: Amroha, Uttar Pradesh-244223, India T +91-5924-267437& +91-5924-267438

**HEAD OFFICE:** Jubilant Ingrevia Limited, Plot 1-A, Sector 16-A, Institutional Area, Noida, Uttar Pradesh, 201301 – India, T +91-120-4361000 - F +91-120-4234881 / 84 / 85 / 87 / 95 / 96 [support@jubl.com](mailto:support@jubl.com)  
[www.jubilantingrevia.com](http://www.jubilantingrevia.com)

##### 1.4. Emergency telephone number

For Chemical Emergency ONLY (in the case of fire, leak, spill, exposure or accident) Call

Chemtrec: 1-800-424-9300 (US), 1-703-527-3887 (Outside U.S.)

Chemtrec (India) : 000-800-100-7141

For ALL other emergencies call Emergency Control Room Gajraula at 99970 22412

#### SECTION 2: Hazard(s) identification

##### 2.1. Classification of the substance or mixture

###### GHS-US classification

Acute tox. 4 (Oral)	H302	Harmful if swallowed
Skin corrosion/irritation 2	H315	Causes skin irritation
Serious eye damage/eye irritation 2A	H319	Causes serious eye irritation
Specific target organ tox. 3 (Single exposure)	H335	May cause respiratory irritation
Acute aquatic tox. 1	H400	Very toxic to aquatic life

##### 2.2. Label Elements

GHS-US labeling

Hazard Pictogram (GHS-US)

Jubilant Ingrevia Limited

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GHS 07



GHS 09

**Signal Word:** *Warning!*

#### **PRECAUTIONARY STATEMENTS:**

- P264: Wash hands thoroughly after handling.
- P270: Do not eat, drink or smoke when using this product.
- P280: Wear protective gloves/protective clothing/eye protection/face protection.
- P261: Avoid breathing dust/fume/gas/mist/vapours/spray.
- P271: Use only outdoors or in a well-ventilated area.
- P273: Avoid release to the environment.
- P301+312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
- P330: Rinse mouth.
- P302+P352: IF ON SKIN: Wash with plenty of soap and water.
- P332+313: If skin irritation occurs: Get medical advice/attention.
- P362: Take off contaminated clothing and wash before reuse.
- P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P337+313: If eye irritation persists: Get medical advice/attention.
- P304+340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- P312: Call a POISON CENTER or doctor/physician if you feel unwell.
- P391: Collect spillage.
- P403+P233: Store in a well-ventilated place. Keep container tightly closed.
- P405: Store locked up.
- P501: Dispose of contents/container to local/regional/national/international regulations.

#### **2.3. Other hazards**

No additional information available

#### **2.4. Unknown acute toxicity (GHS-US)**

Not applicable

#### **SECTION 3: Composition/information on ingredients**

Sr.No.	Chemical	CAS #	EC#	Purity
1	Sodium Pyrethrin	3811-73-2	223-296-5	40 % to 45 %
2	Water	7732-18-5	231-791-2	45% to 55%



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#### SECTION 4: First aid measures

##### 4.1. Description of first aid measures

- First-aid measures general : Never give anything by mouth to an unconscious person. Do not induce vomiting. If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation: Allow breathing of fresh air. Allow the victim to rest. If you feel unwell, seek medical attention. In case of irregular breathing or respiratory arrest provide artificial respiration. Do not apply mouth-to-mouth resuscitation. Induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device.
- First-aid measure after skin contact : Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Immediately flush skin with plenty of water for at least 15 minutes. If skin irritation occurs: Get medical advice/attention.
- First-aid measures after eye contact: Rinse immediately with plenty of water. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention if pain, blinking or redness persists.
- First-aid measures after ingestion : Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

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

- Symptoms/injuries : Not expected to present a significant hazard under anticipated conditions of normal use.
- Symptoms/injuries after inhalation : Inhalation may cause irritation, cough, shortness of breath.
- Symptoms/injuries after skin contact : May cause mild skin irritation.
- Symptoms/injuries after eye contact : Causes serious eye irritation.
- Symptoms/injuries after ingestion : May cause nausea, vomiting and diarrhea.
- Chronic symptoms : Affects the kidneys & liver. Laboratory experiments have resulted in mutagenic effects. Chronic exposure may cause blood effects.

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

Treat symptomatically.

#### SECTION 5 : FIRE-FIGHTING MEASURES

##### 5.1. Extinguishing media

- *Appropriate extinguishing media:* Dry chemical powder, chemical foam, and alcohol resistant foam. Water may also be used. Water sprays can be effective in cooling down the fire-exposed containers and knocking down the vapors. Water jets may be used to flush spills away and dilute the same to non-flammable mixtures.

##### 5.2. Special Protective Equipment and Precautions for Fire Fighter

- This material is hazardous to health, but fire fighters may enter areas with extreme care. Full protective clothing including a self-contained breathing apparatus, coat, pants, gloves, boots and bands around legs, arms and waist should be provided. No skin surface should be exposed.
- Evacuate the area and fight fires from a safe distance.
- If tank, rail car or tank truck is involved in a fire, ISOLATE for 800 meters (1/2 mile) in all directions; also, consider initial evacuation for 800 meters (1/2 mile) in all directions or as per locally valid procedures.
- Fire fighters must wear Self Contained Breathing Apparatus (SCBA) and full protective clothing. The chemical is harmful in contact with skin.
- Report any run-off of fire waters contaminated with this chemical as per local and federal procedures applicable.

##### Unusual fire and explosion hazard:

- Toxic vapors may be released on thermal decomposition including Nitrogen Oxides, Carbon Monoxide and Sulfur Oxide and Zinc Oxide.
- High vapor concentration may result in an explosion hazard.



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- When heated to decomposition, it emits highly toxic fumes of Sulfur.
- Vapors are heavier than air. May travel considerable distance from source and flashback.
- Material may be ignited only if preheated to high temperatures, for example in a fire. Dust may be ignitable if mixed with air in the presence of an ignition source.

## SECTION 6 : ACCIDENTAL RELEASE MEASURES

### Minor Spills

- Clean up all spills immediately following relevant Standard Operating Procedures.
- Avoid breathing vapors and contact with skin and eyes.
- Shut off leak source if possible.
- Shut off all possible sources of ignition.
- Wear protective clothing, boots, impervious gloves and safety glasses.
- Wipe up.
- Decontaminate all equipment.

### Major Spill

- Alert Emergency Responders and tell them location and nature of hazard.
- Shut off all possible sources of ignition and increase ventilation.
- Wear protective clothing, full boots, impervious gloves, safety glasses and Self Contained Breathing Apparatus (SCBA), as may be deemed appropriate.
- Clear area of personnel and move upwind.
- Stop leaks if possible.
- Prevent, by any means available, spillage from entering drains or water and watercourses.
- Collect recoverable product into labeled containers for recycling, recovery or disposal.
- Contain spill with sand, earth or vermiculite.
- Spread area with lime or absorbent material, and leave for at least 1 hour before washing.
- Clean up all tools and equipment.
- Inform authorities in event of contamination of any public sewers, drains or water bodies.

## SECTION 7: HANDLING AND STORAGE

### 7.1. Precautions for safe handling

- Do not breathe vapor or mist.
- Wear protective gloves/clothing and eye/face protection.
- Wash thoroughly after handling.
- Ground and secure containers when dispensing or pouring product.
- Avoid contact with incompatible materials.
- When handling, DO NOT eat, drink or smoke.
- Launder contaminated clothing before re-use.
- If on skin or hair, IMMEDIATELY remove all contaminated clothing and rinse/shower with plenty of water.
- Use in a well ventilated place/Use protective clothing commensurate with exposure levels.

### 7.2. Conditions for safe storage, including any incompatibilities

- Store at ambient temperature in a well-ventilated place.
- Do not store at above 54 °C.
- Store away from incompatible materials (Strong oxidizer).
- Keep only in original container.
- Keep securely closed when not in use.

## SECTION 8: EXPOSURE CONTROLS / PERSONAL PROTECTION



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#### 8.1. Control parameters

- **Exposure Limits Values**

Chemical Name	STEL (ppm)	NIOSH	ACGIH	OSHA
Sodium pyrrithione	None available	None available	None available	None available

- **Exposure Limits (International)**

- Not available.

- **Derived No-Effect-Levels (DNEL) / Predicted No-effect-concentration (PNEC)**

- DNEL and PNEC data not available.

#### 8.2. Exposure controls

- **Appropriate Engineering Controls:**

- Provide exhaust ventilation or other engineering controls to keep the relevant airborne concentrations below their respective occupational exposure limits. Local ventilation is usually preferred. Ensure that eyewash stations and safety showers are close to the workstation location.

- **Personal Protection:**

- Protective clothing should be selected specifically for the working place, depending on concentration and quantity of the hazardous substances handled. The resistance of the protective clothing to chemicals should be ascertained with the respective supplier.
- **Hands:** Rubber or neoprene gloves and additional protection including impervious boots, apron. or coveralls as needed in areas of unusual exposure to prevent skin contact.
- **Eyes:** Safety goggles/ Chemical Safety glasses and Face shield.
- **Clothing:** Boots and clothing to prevent contact.
- **Respirator:** Follow the OSHA respirator regulations found in 29CFR 1910.134 or European Standard EN 149. Always use a NIOSH or European Standard EN 149 approved respirator when necessary. For emergency situations, wear a positive pressure, pressure-demand, full face piece self-contained breathing apparatus (SCBA) or pressure- demand supplied air respirator with escape SCBA and a fully-encapsulating, chemical resistant suit. (EPA,1998).

#### General Hygiene and general comments:

- Wash hands and face after working with substance.
- Immediately change contaminated clothing.
- Apply skin protective barrier cream.

#### SECTION 9 : PHYSICAL AND CHEMICAL PROPERTIES

- **Information on basic physical and chemical properties.**

Sr.No.	Parameter	Typical value
1.	Appearance	Light yellow to amber color liquid
2.	Odor	Mild pyridine
3.	Odor Threshold	Not available
4.	pH	8.5 - 10.5 (@ 25 Deg. C) (10%



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		solution in neutral, distilled water)
5.	Melting point/Freezing point	Not available/-25 ° C to -30 ° C / -13 ° F to -22 ° F
6.	Boiling Point	109 °C / 228 ° F
7.	Flash point	Not available
8.	Evaporation rate (n-BuAc=1)	0.8 (n-Butyl acetate = 1)
9.	Flammability (Liquid)	Not available
10.	Upper/lower flammability or Explosive limits	Not available
11.	Vapor pressure	19 mmHg (@25 °C)
12.	Vapor density (air=1)	5.7
13.	Relative density	1.2
14.	Solubility	Freely soluble in water
15.	Partition coefficient : n-(Octonol / water)	0.00015
16.	Auto-ignition temperature	Not available
17.	Decomposition temperature	Not available
18.	Viscosity	Not available
19.	Explosive property	Not available
20.	Oxidizing property	Not available

#### SECTION 10: STABILITY AND REACTIVITY

- **Stability:** The product is stable under normal conditions.
- **Conditions to avoid:** Keep away from heat, sparks, open flame, high temperature and incompatible chemicals. Avoid creating dusts as an explosive dust air mixture can be created at high concentrations. If dusts are created, ensure no sources of ignition are present. Take precautionary measures to prevent electrostatic discharges. Product is not sensitive to mechanical shock or impact.
- **Incompatible materials:** Strong Oxidizing agents.
- **Hazardous decomposition products:** Thermal decomposition may produce very toxic Sodium containing fumes of Sulphur, Carbon monoxide, Sulphur dioxide.
- **Possibility of hazardous reactions:** Hazardous Polymerization: Not reported.

#### SECTION 11: TOXICOLOGICAL INFORMATION

##### 11.1. Information on toxicological effects

###### a) Acute toxicity

- Irritating to eyes and skin on contact. Inhalation causes irritation of the lungs and respiratory system. Inflammation of the eye is characterized by redness, watering, and itching. Skin inflammation is characterized by itching, scaling, reddening, or, occasionally, blistering. This material produces an irritating stench. Do not inhale and always use under a fume hood.
- Inhalation can result in inflammation of the respiratory system, headaches, nausea, and vomiting. Always cover all exposed skin with an impermeable layer and use proper eye protection. A OSHA/MSHA approved dust and



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vapor respirator is required when working with this material. Follow safe industrial hygiene practices and always wear proper protective equipment when handling this compound.

#### TOXICITY

- **RTECS#:** UT9000000
- **LD50/LC50**

Oral Rodent Mouse, LD50:	870 mg/kg
Intraperitoneal Rodent mouse, LD50:	370 mg/kg
Inhalation Rodent Rat, LC50:	Not available

#### LD50 (Oral) ATE- 1548.6 mg/kg (calculated)

**b) Skin corrosion/irritation**

- Causes skin irritation.

**c) Serious eye damage/irritation**

- Causes serious eye irritation.

**d) Respiratory or skin sensitization**

- Causes irritation to respiratory system.

**e) Germ cell Mutagenicity**

- No data is available.

**f) Carcinogenicity**

- Not listed by NTP, IARC and OSHA.
- Not present on the EU CMR list.
- According to information presently available Sodium pyrithione is not found to be carcinogenic.

**g) Reproductive toxicity**

- This product is not considered to be a reproductive or developmental hazard. However, this material when tested in laboratory animals at maternally toxic doses only was found to cause developmental and/or reproductive toxicity.

**h) STOT-single exposure**

- May cause respiratory irritation.

**i) STOT- repeated exposure**

- No data available.

**j) Aspiration Hazards**

- No data available.

## SECTION 12: ECOLOGICAL INFORMATION

### 12.1. Toxicity

#### Ecotoxicity:

- Rainbow trout (*Salmo gairdneri*), - (measured, static) 96 h LC50 = 0.0066 - 0.008 mg/l (40% aqueous Sodium Pyrithione).
- Bluegill - (measured, static) 96 h LC50 = 7.6 - 9.6 mg/l (40% aqueous Sodium Pyrithione).
- Daphnia magna, - (nominal, static). 48 h LC50 = 0.022 mg/l (40% aqueous Sodium Pyrithione).
- Bobwhite quail - acute oral LD50 = 441 mg/kg (40% aqueous Sodium Pyrithione).
- Bobwhite quail - 8 DAYS dietary LC50 = 3,075 ppm (40% aqueous Sodium Pyrithione).
- Mallard duck - 8 DAYS dietary LC50 = 10,033 ppm (40% aqueous Sodium Pyrithione).





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- Bobwhite quail - acute oral LD50 =200 mg/kg (94.9% aqueous Sodium Pyrithione).
- Mallard duck - acute oral LD50= 92 mg/kg (94.9% aqueous Sodium Pyrithione).
- This material is Toxic to wildlife and domestic animals. Highly/very toxic to fish and other aquatic organisms.

#### 12.2. Persistence and degradability

- Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
- **Toxicity of the Products of Biodegradation:** The products of degradation are less toxic than the product itself.

#### 12.3. Bioaccumulative potential

- Log Kow = -3.98 (Estimated).
- BCF=3.162(Estimated).(Bio concentration in aquatic organisms is low).  
Based on the Log Kow and Bio concentration factor value it is expected to have low potential to Concentrate in fatty tissue of fish and aquatic organisms relative to its surroundings.

#### 12.4. Mobility in soil

- Log Koc = 1.946 (predicted). Moderate absorption in soil.
- Henry's Law Constant = 1.46E-017 atm-m<sup>3</sup>/mole.
- Log Kow = -3.98 Low potential to bio accumulate.

#### 12.5. Other adverse effects

- **Environment Fate:**  
Based on the environmental modeling, this material has a low potential to get absorbed in the organic matter of soil and is expected to be volatile from aqueous bodies. Since this is an estimated result it is recommended that the material should not be disposed into the environment. The material should never be disposed into the sewage.

### SECTION 13: DISPOSAL CONSIDERATIONS

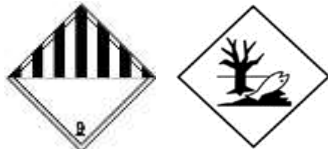

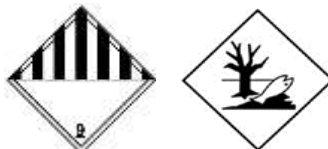
#### 13.1. Waste treatment methods

- Burn in a chemical incinerator equipped with an afterburner and scrubber.
- Dispose of this material in accordance with standard practice for disposal of potentially hazardous materials as required by applicable federal, state or local laws. Note that disposal regulations may also apply to empty containers and equipment rinsates.

### SECTION 14: TRANSPORT INFORMATION

- In accordance with US DOT/ IMDG / IATA

US DOT	IMDG	IATA
<b>14.1. UN number</b>		
3082	3082	3082
<b>14.2. UN proper shipping name</b>		
Environmentally hazardous substance, liquid, N.O.S.	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.	Environmentally hazardous substance, liquid, N.O.S
<b>Transport document description</b>		
UN 3082, Environmentally hazardous substance, liquid, N.O.S. 9, III	UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. 9, III	UN 3082, Environmentally hazardous substance, liquid, N.O.S 9, III

14.3. Transport hazard class(es)		
9	9	9
		
14.4. Packing group		
III- Minor Danger	III- Minor Danger	III- Minor Danger
14.5. Environmental hazards		
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant :Yes	Dangerous for the environment : Yes

## SECTION 15: REGULATORY INFORMATION

### European Union Information

#### Classification as per CLP Regulation 1272/2008:

- **Hazards Class and Category:** Acute toxicity Oral Cat 4; Skin irrit Cat 2; Eye irrit .Cat2; STOT SE Cat 3, acute aquatic toxicity Category 1
- **Hazard Statements:** H302;H315;H319;H335;H400

### US information

#### **TSCA**

- CAS# 3811-73-2 is listed on the TSCA Inventory.
- CAS# 7732-18-5 is listed on the TSCA Inventory.
- SARA LISTED: No

#### **FIFRA Listing of Pesticide Chemicals (40 CFR 180):**

- This product is regulated under the Federal Insecticide, Fungicide and Rodenticide Act. It must be used for purposes consistent with its labeling.

#### **Supplier Notification Requirements (40 CFR 372.45), 313 Reportable Components**

- **Clean Air Act Toxic ARP Section 112r:** CAA 112R None established.
- **Clean Air Act Socmi:**HON SOC None established.
- **Clean Air Act VOC Section 111:**CAA 111 None established.
- **Clean Air Act Haz. Air Pollutants Section 112:**CAA AP None established.

#### **WGK (Water Danger/Protection)**

- CAS# 3811-73-2: Not available
- CAS# 7732-18-5: Not available

#### **Canada**

- CAS# 3811-73-2 is listed on Canada's DSL List.
- CAS# 7732-18-5 is listed on Canada's DSL List.
- Canadian WHMIS Classifications: D1B, D2B.
- NDSL: No

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations.

#### **Superfund Amendments and Reauthorization Act (SARA) Title III:**

- Hazard Categories Sections 311 / 312 (40 CFR 370.2):
- Health :Immediate (Acute) Health Hazard
- Physical: None

## SECTION 16: OTHER INFORMATION



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#### Compilation information of safety data sheet

**Chemical:** Jubithione NaPT 40

**CAS #:** 3811-73-2 (active)

**File Name:** 0676Gj Ghs08 Div.3 sds Jubithione NaPT 40

**Revision Number:** 08

**Date of Issue:** April 04, 2024

**Revision Due Date:** May, 2027

**Supersedes Date:** July 05, 2022

**Supersedes version:** 0676Gj Ghs06 Div.3 sds Sodium Pyrithione 40%Aq. Soln.

#### (a) A key or legend to aberrations and acronyms used in the safety data sheet;

- PBT =Persistent Bio accumulative and Toxic.
- vPvB= Very Persistent and Very Bio accumulative.
- SCBA= Self Contained Breathing Apparatus.
- NIOSH REL= National Institute for Occupational Safety and Health Recommended Exposure Limit. OSHA PEL=Occupational Safety and Health Administration Permissible Exposure Limit.
- OELTWA= Occupational Exposure Limit Time Weighted Averages.
- IDLH= Immediately Dangerous to Life or Health.
- UEL= Upper Explosive Limit.
- LEL= Lower Explosive Limit.
- RTECS= Registry of Toxic Effects of Chemical Substances.
- NTP=National Toxicology Program
- IARC= International Agency for Research on Cancer.
- EPA=Environmental Protection Agency.
- TSCA= Toxic Substances Control Act.
- CSR=Chemical Safety Report.
- BCF = Bio Concentration Factor.
- CLP = Classification, Labelling and Packaging.
- LD / LC = Lethal Doses / Lethal Concentration.
- GHS = Globally Harmonized System.
- IMDG-Code = International Maritime Code for Dangerous Goods.
- EmS = Emergency measures on Sea.
- ICAO = International Civil Aviation Organization.
- IATA/DGR= International Air Transport Association/Dangerous Goods Regulation.

#### (b) Key Literature reference and sources for data

##### Biographical reference and data sources

- Globally Harmonized System of Classification and Labelling of Chemicals.
- CLP REG (regulation) (EC) no. 1272/2008, last modification by regulation (EC) no. 790/2009
- REG (EC) no. 1907/2006, last modification by REG (EC) Nr. 830/2015

##### Internet

- RTECS

##### SDS US (GHS HazCom 2012)

*This information is based on our current knowledge and is intended to describe the product for the purposes of health,safety and environmental requirements only.It should not therefore be construed as guaranteeing any specific property of the product.*