

SAFETY DATA SHEET

spectrum®



Revision date 14-April-2022

Revision Number 2

1. Identification

Product identifier

Product Name PARAFORMALDEHYDE, PURIFIED

Other means of identification

Product Code(s) P1010

UN/ID no UN2213

Synonyms None

Recommended use of the chemical and restrictions on use

Recommended use No information available

Restrictions on use No information available

Details of the supplier of the safety data sheet

Supplier Address

Spectrum Chemical Mfg. Corp.
14422 South San Pedro St.
Gardena, CA 90248
(310) 516-8000

Emergency telephone number

Emergency Telephone Chemtrec 1-800-424-9300

2. Hazard(s) identification

Classification

| | |
|---|-------------|
| Acute toxicity - Oral | Category 4 |
| Acute toxicity - Inhalation (Dusts/Mists) | Category 4 |
| Skin corrosion/irritation | Category 2 |
| Serious eye damage/eye irritation | Category 2A |
| Skin sensitization | Category 1A |
| Germ cell mutagenicity | Category 2 |
| Carcinogenicity | Category 2 |
| Flammable solids | Category 2 |

Hazards not otherwise classified (HNOC)

Not applicable

Label elements

Warning

Hazard statements

Harmful if swallowed
Harmful if inhaled
Causes skin irritation
Causes serious eye irritation
May cause an allergic skin reaction
Suspected of causing genetic defects
Suspected of causing cancer
Flammable solid



Appearance Powder or powder

Physical state Solid

Odor Formaldehyde

Precautionary Statements - Prevention

Obtain special instructions before use
Do not handle until all safety precautions have been read and understood
Wear protective gloves/protective clothing/eye protection/face protection
Wash face, hands and any exposed skin thoroughly after handling
Do not eat, drink or smoke when using this product
Avoid breathing dust/fume/gas/mist/vapors/spray
Use only outdoors or in a well-ventilated area
Contaminated work clothing must not be allowed out of the workplace
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
Ground/bond container and receiving equipment
Use explosion-proof electrical/ ventilating / lighting/ .? / equipment

Precautionary Statements - Response

IF exposed or concerned: Get medical advice/attention
Specific treatment (see .? on this label)
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 ON SKIN: Wash with plenty of water and soap
Take off contaminated clothing and wash it before reuse
If skin irritation or rash occurs: Get medical advice/attention
IF INHALED: Remove person to fresh air and keep comfortable for breathing
IF SWALLOWED: Call a POISON CENTER or doctor if you feel unwell
Rinse mouth
In case of fire: Use CO2, dry chemical, or foam to extinguish

Precautionary Statements - Storage

Store locked up.

Precautionary Statements - Disposal

Dispose of contents/container to an approved waste disposal plant

Other information

Harmful to aquatic life with long lasting effects. Harmful to aquatic life.

3. Composition/information on ingredients

Substance

| Chemical name | CAS No | Weight-% | Trade secret |
|------------------|------------|----------|--------------|
| Paraformaldehyde | 30525-89-4 | 100 | * |

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First-aid measures

Description of first aid measures

| | |
|---|---|
| General advice | Show this safety data sheet to the doctor in attendance. IF exposed or concerned: Get medical advice/attention. |
| Inhalation | Remove to fresh air. Get medical attention immediately if symptoms occur. If breathing has stopped, give artificial respiration. Get medical attention immediately. If symptoms persist, call a physician. |
| Eye contact | Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and persists. |
| Skin contact | Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes. May cause an allergic skin reaction. In the case of skin irritation or allergic reactions see a physician. |
| Ingestion | Do NOT induce vomiting. Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Get medical attention. |
| Self-protection of the first aider | Remove all sources of ignition. Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. Avoid contact with skin, eyes or clothing. Avoid breathing dust/fume/gas/mist/vapors/spray. Use personal protective equipment as required. See section 8 for more information. |

Most important symptoms and effects, both acute and delayed

| | |
|-----------------|---|
| Symptoms | Itching. Rashes. Hives. May cause redness and tearing of the eyes. Burning sensation. Coughing and/ or wheezing. Difficulty in breathing. |
|-----------------|---|

Indication of any immediate medical attention and special treatment needed

| | |
|---------------------------|--|
| Note to physicians | May cause sensitization in susceptible persons. Treat symptomatically. |
|---------------------------|--|

5. Fire-fighting measures

| | |
|--|---|
| Suitable Extinguishing Media Large Fire | Dry chemical. Carbon dioxide (CO ₂). water spray. Alcohol resistant foam. CAUTION: Use of water spray when fighting fire may be inefficient. |
| Unsuitable extinguishing media | Do not scatter spilled material with high pressure water streams. |
| Specific hazards arising from the chemical | risk of ignition. Keep product and empty container away from heat and sources of ignition. In the event of fire, cool tanks with water spray. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. Product is or contains a sensitizer. May cause sensitization by skin contact. |
| Explosion data Sensitivity to mechanical impact | none. |
| Sensitivity to static discharge | yes. |
| Special protective equipment for fire-fighters | Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment. |

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Ensure adequate ventilation. Keep people away from and upwind of spill/leak. ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Pay attention to flashback. Take precautionary measures against static discharges. All equipment used when handling the product must be grounded. Do not touch or walk through spilled material. Avoid generation of dust. Do not breathe dust.

Other information Ventilate the area. Refer to protective measures listed in Sections 7 and 8.

Methods and material for containment and cleaning up

Methods for containment Stop leak if you can do it without risk. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors. Keep out of drains, sewers, ditches and waterways.

Methods for cleaning up Take precautionary measures against static discharges. Pick up and transfer to properly labeled containers.

7. Handling and storage

Precautions for safe handling

Advice on safe handling Use personal protection equipment. Avoid breathing vapors or mists. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use grounding and bonding connection when transferring this material to prevent static discharge, fire or explosion. Use with local exhaust ventilation. Use spark-proof tools and explosion-proof equipment. Keep in an area equipped with sprinklers. Use according to package label instructions. Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes or clothing. In case of insufficient ventilation, wear suitable respiratory equipment. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash before reuse. Remove contaminated clothing and shoes.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat, sparks, flame and other sources of ignition (i.e., pilot lights, electric motors and static electricity). Keep in properly labeled containers. Do not store near combustible materials. Keep in an area equipped with sprinklers. Store in accordance with the particular national regulations. Store in accordance with local regulations. Keep out of the reach of children. Store locked up.

8. Exposure controls/personal protection

Control parameters

Exposure Limits The following ingredients are the only ingredients of the product above the cut-off level (or level that contributes to the hazard classification of the mixture) which have an exposure limit applicable in the region for which this safety data sheet is intended or other recommended limit. At this time, the other relevant constituents have no known exposure limits from the sources listed here.

Appropriate engineering controls

Engineering controls Showers
Eyewash stations
Ventilation systems.

Individual protection measures, such as personal protective equipment

| | |
|---------------------------------------|---|
| Eye/face protection | Tight sealing safety goggles. |
| Hand protection | Wear suitable gloves. Impervious gloves. |
| Skin and body protection | Wear suitable protective clothing. Long sleeved clothing. Chemical resistant apron. Antistatic boots. |
| Respiratory protection | No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. |
| General hygiene considerations | Do not eat, drink or smoke when using this product. Contaminated work clothing should not be allowed out of the workplace. Regular cleaning of equipment, work area and clothing is recommended. Wash hands before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection. Avoid contact with skin, eyes or clothing. Avoid breathing dust/fume/gas/mist/vapors/spray. |

9. Physical and chemical properties

Information on basic physical and chemical properties

| | |
|-----------------------|--------------------------|
| Physical state | Solid |
| Appearance | Powder or powder |
| Color | White |
| Odor | Formaldehyde |
| Odor threshold | No information available |

| <u>Property</u> | <u>Values</u> | <u>Remarks • Method</u> |
|---|------------------------------------|--------------------------------|
| pH | 6.7 | None known |
| Melting point / freezing point | >120 °C / °F | None known |
| Boiling point / boiling range | no data available | None known |
| Flash point | 70 °C / 158 °F | CC (closed cup) |
| Evaporation rate | no data available | None known |
| Flammability (solid, gas) | no data available | None known |
| Flammability Limit in Air | | None known |
| Upper flammability or explosive limits | No data available | |
| Lower flammability or explosive limits | No data available | |
| Vapor pressure | 0.2 | None known |
| Vapor density | no data available | None known |
| Relative density | 1.46 | None known |
| Water solubility | Partially soluble in cold water | None known |
| Solubility(ies) | Insoluble in most organic solvents | None known |
| Partition coefficient | No data available | None known |
| Autoignition temperature | 300 °C / 572 °F | None known |
| Decomposition temperature | | None known |
| Kinematic viscosity | no data available | None known |
| Dynamic viscosity | No data available | None known |

Other information

| | |
|-----------------------------|--------------------------|
| Explosive properties | No information available |
| Oxidizing properties | No information available |
| Softening point | No information available |
| Molecular weight | No information available |
| VOC Content (%) | No information available |
| Liquid Density | No information available |
| Bulk density | No information available |

10. Stability and reactivity

| | |
|-------------------|---------------------------|
| Reactivity | No information available. |
|-------------------|---------------------------|

| | |
|---|--|
| Chemical stability | Stable under normal conditions. |
| Possibility of hazardous reactions | None under normal processing. |
| Conditions to avoid | Heat, flames and sparks. Excessive heat. |
| Incompatible materials | Strong acids. Strong bases. Strong oxidizing agents. |
| Hazardous decomposition products | None known based on information supplied. |

11. Toxicological information

Information on likely routes of exposure

Product Information

| | |
|---------------------|---|
| Inhalation | Specific test data for the substance or mixture is not available. May cause irritation of respiratory tract. Harmful by inhalation. (based on components). |
| Eye contact | Specific test data for the substance or mixture is not available. Irritating to eyes. (based on components). Causes serious eye irritation. |
| Skin contact | May cause sensitization by skin contact. Specific test data for the substance or mixture is not available. Repeated or prolonged skin contact may cause allergic reactions with susceptible persons. (based on components). Causes skin irritation. |
| Ingestion | Specific test data for the substance or mixture is not available. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed. (based on components). |

Symptoms related to the physical, chemical and toxicological characteristics

| | |
|-----------------|--|
| Symptoms | Itching. Rashes. Hives. Redness. May cause redness and tearing of the eyes. Coughing and/ or wheezing. |
|-----------------|--|

Acute toxicity

Numerical measures of toxicity

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|--------------------------------|---------------------|-------------|--------------------------------------|
| Paraformaldehyde 30525-89-4 | = 800 mg/kg (Rat) | - | = 1070 mg/m ³ (Rat) 4 h |

Delayed and immediate effects as well as chronic effects from short and long-term exposure

| | |
|--|--|
| Skin corrosion/irritation | Classification based on data available for ingredients. Irritating to skin. |
| Serious eye damage/eye irritation | Classification based on data available for ingredients. Causes serious eye irritation. |
| Respiratory or skin sensitization | May cause sensitization by skin contact. |
| Germ cell mutagenicity | Contains a known or suspected mutagen. Classification based on data available for ingredients. Suspected of causing genetic defects. |
| Reproductive toxicity | No information available. |
| STOT - single exposure | No information available. |
| STOT - repeated exposure | No information available. |
| Aspiration hazard | No information available. |
| Other adverse effects | No information available. |
| Interactive effects | No information available. |

12. Ecological information

Ecotoxicity Harmful to aquatic life with long lasting effects.

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|--------------------------------|----------------------|------|----------------------------|--|
| Paraformaldehyde 30525-89-4 | - | - | - | EC50-Daphnia magna (Water Flea)-42 mg/l 24h |

Persistence and degradability No information available.
Bioaccumulation Inherently biodegradable.

Other adverse effects No information available.

13. Disposal considerations

Waste treatment methods

Waste from residues/unused products Should not be released into the environment. Dispose of in accordance with local regulations. Dispose of waste in accordance with environmental legislation.

Contaminated packaging Empty containers pose a potential fire and explosion hazard. Do not cut, puncture or weld containers.

14. Transport information

DOT

UN/ID no UN2213
Proper Shipping Name: Paraformaldehyde
Hazard class 4.1
Packing group: III
Special Provisions A1, B120, IB8, IP3, T1, TP33
Marine Pollutant Severe Marine Pollutant
Description: UN2213, Paraformaldehyde, 4.1, III
Emergency Response Guide Number 133

TDG

UN-No: UN2213
Proper Shipping Name: Paraformaldehyde
Hazard class 4.1
Packing Group: III
Description: UN2213, Paraformaldehyde, 4.1, III

MEX

UN-No UN2213
Proper Shipping Name Paraformaldehyde
Hazard class 4.1
Packing Group III
Description UN2213, Paraformaldehyde, 4.1, III

ICAO (air)

UN-No: UN2213
Proper Shipping Name: Paraformaldehyde
Hazard class 4.1
Packing Group: III
Special Provisions A3
Description: UN2213, Paraformaldehyde, 4.1, III

IATA

UN number UN2213
Proper Shipping Name: Paraformaldehyde
Transport hazard class(es) 4.1
Packing group III
Description: UN2213, Paraformaldehyde, 4.1, III

IMDG

UN number UN2213
Proper shipping name Paraformaldehyde
Transport hazard class(es) 4.1
Packing group III
EmS-No F-A, S-G
Special Provisions 223, 967
Marine pollutant NP1
Description UN2213, Paraformaldehyde, 4.1, III

RID

UN number UN2213
Proper Shipping Name: Paraformaldehyde
Transport hazard class(es) 4.1
Packing group III
Classification code F1
Description: UN2213, Paraformaldehyde, 4.1, III
Labels 4.1

ADR

UN number 2213
Proper Shipping Name: Paraformaldehyde
Transport hazard class(es) 4.1
Packing group III
Classification code F1
Tunnel restriction code (E)
Description: 2213, Paraformaldehyde, 4.1, III, (E)
Labels 4.1

ADN

UN/ID No UN2213
Proper shipping name Paraformaldehyde
Transport hazard class(es) 4.1
Packing Group III
Classification code F1
Description UN2213, Paraformaldehyde, 4.1, III
Hazard label(s) 4.1
Limited quantity (LQ) 5 kg
Equipment Requirements PP

15. Regulatory information**International Inventories****TSCA**

Complies

DSL/NDSL

Complies

EINECS/ELINCS

Does not Comply

ENCS

This product complies with ENCS:

IECSC

This product complies with China:

KECL

Complies

PICCS

Complies

AICS

All the constituents of this material are listed on the Australian Inventory of Chemical Substances (AICS).

Legend:

- TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory
- DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List
- EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances
- ENCS** - Japan Existing and New Chemical Substances
- IECSC** - China Inventory of Existing Chemical Substances
- KECL** - Korean Existing and Evaluated Chemical Substances
- PICCS** - Philippines Inventory of Chemicals and Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

Should this product meet EPCRA 311/312 Tier reporting criteria at 40 CFR 370, refer to Section 2 of this SDS for appropriate classifications.

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302).

| Chemical name | Hazardous Substances RQs | Extremely Hazardous Substances RQs |
|--------------------------------|-------------------------------------|------------------------------------|
| Paraformaldehyde 30525-89-4 | 1000 lb final RQ 454 kg final RQ | - |

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

| Chemical name | New Jersey | Massachusetts | Pennsylvania |
|--------------------------------|------------|---------------|----------------------|
| Paraformaldehyde 30525-89-4 | 1454 | Present | Environmental hazard |

U.S. EPA Label Information

EPA Pesticide Registration Number Not applicable

16. Other information

NFPA

Health hazards 2

Flammability 2

Instability 0

Physical and chemical properties -

HMIS

Health hazards 2 *

Flammability 2

Physical hazards 0

Personal protection X

Key or legend to abbreviations and acronyms used in the safety data sheet**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

| | | | |
|---------|-----------------------------|------|----------------------------------|
| TWA | TWA (time-weighted average) | STEL | STEL (Short Term Exposure Limit) |
| Ceiling | Maximum limit value | | |

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)
U.S. Environmental Protection Agency ChemView Database
European Food Safety Authority (EFSA)
EPA (Environmental Protection Agency)
Acute Exposure Guideline Level(s) (AELG(s))
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act
U.S. Environmental Protection Agency High Production Volume Chemicals
Food Research Journal
Hazardous Substance Database
International Uniform Chemical Information Database (IUCLID)
Japan GHS Classification
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)
NIOSH (National Institute for Occupational Safety and Health)
National Library of Medicine's ChemID Plus (NLM CIP)
National Library of Medicine's PubMed database (NLM PUBMED)
National Toxicology Program (NTP)
New Zealand's Chemical Classification and Information Database (CCID)
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications
Organization for Economic Co-operation and Development High Production Volume Chemicals Program
Organization for Economic Co-operation and Development Screening Information Data Set
World Health Organization

Revision date 14-April-2022

Revision Note No information available.

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, 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.

End of Safety Data Sheet