

SAFETY DATA SHEET

B59A226

Section 1. Identification

Product name : Heat-Flex® Hi-Temp 1200
Dark Gray

Product code : B59A226

Other means of identification : Not available.

Product type : Liquid.

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

Paint or paint related material.

Manufacturer : THE SHERWIN-WILLIAMS COMPANY
101 W. Prospect Avenue
Cleveland, OH 44115

Emergency telephone number of the company : US / Canada: (800) 424-9300
Mexico: SETIQ 800-00-214-00 / 55-5559-1588 Available 24 hours and 365 days a year

Product Information Telephone Number : US / Canada: (800) 524-5979
Mexico: Not Available

Transportation Emergency Telephone Number : US / Canada: (800) 424-9300
Mexico: SETIQ 800-00-214-00 / 55-5559-1588 Available 24 hours and 365 days a year

Section 2. Hazards identification

OSHA/HCS status : This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Classification of the substance or mixture : FLAMMABLE LIQUIDS - Category 3
SKIN CORROSION/IRRITATION - Category 2
SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A
CARCINOGENICITY - Category 2
SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1
ASPIRATION HAZARD - Category 1
Percentage of the mixture consisting of ingredient(s) of unknown acute toxicity: 1.5% (oral), 1.5% (dermal), 1.5% (inhalation)

GHS label elements

Hazard pictograms :



Signal word : Danger

Hazard statements : Flammable liquid and vapor.
May be fatal if swallowed and enters airways.
Causes skin irritation.
Causes serious eye irritation.
Suspected of causing cancer.
Causes damage to organs through prolonged or repeated exposure. (lungs)

Date of issue/Date of revision : 4/19/2024

Date of previous issue : 1/22/2024

Version : 27

1/18

B59A226 Heat-Flex® Hi-Temp 1200
Dark Gray

SHW-85-NA-GHS-US

Section 2. Hazards identification

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 and eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating or lighting equipment. Use non-sparking tools. Take action to prevent static discharges. Keep container tightly closed. Do not breathe vapor. Do not eat, drink or smoke when using this product. Wash thoroughly after handling.
- Response
- : IF exposed or concerned: Get medical advice or attention. IF SWALLOWED: Immediately call a POISON CENTER or doctor. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice or 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 or attention.
- Storage
- : Store locked up. Store in a well-ventilated place. Keep cool.
- Disposal
- : Dispose of contents and container in accordance with all local, regional, national and international regulations.
- Supplemental label elements
- DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Contains solvents which can cause permanent brain and nervous system damage. Intentional misuse by deliberately concentrating and inhaling the contents can be harmful or fatal. WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm. FOR INDUSTRIAL USE ONLY. Adequate ventilation required when sanding or abrading the dried film. If Adequate ventilation cannot be provided wear an approved particulate respirator (NIOSH approved). Follow respirator manufacturer's directions for respirator use. DELAYED EFFECTS FROM LONG TERM OVEREXPOSURE. Abrading or sanding of the dry film may release Crystalline Silica which has been shown to cause lung damage and cancer under long term exposure.

Please refer to the SDS for additional information. Keep out of reach of children. Do not transfer contents to other containers for storage.
- Hazards not otherwise classified
- : None known.

Section 3. Composition/information on ingredients

- Substance/mixture
- : Mixture
- Other means of identification
- : Not available.

CAS number/other identifiers

| Ingredient name | % by weight | CAS number |
|-------------------------|-------------|------------|
| Iron Oxide | ≥25 - ≤50 | 1309-37-1 |
| Xylene, mixed isomers | ≤10 | 1330-20-7 |
| Heavy Aromatic Naphtha | ≤3.8 | 64742-94-5 |
| Ethylbenzene | ≤3 | 100-41-4 |
| Aluminum Orthophosphate | ≤3 | 7784-30-7 |
| Methyl n-Amyl Ketone | ≤2.2 | 110-43-0 |
| Mica | ≤3 | 12001-26-2 |
| Naphthalene | <1 | 91-20-3 |

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified and hence require reporting in this section.

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First aid measures

Description of necessary first aid measures

- Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Continue to rinse for at least 10 minutes. Get medical attention.
- Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. If not breathing, if breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.
- Skin contact** : Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Continue to rinse for at least 10 minutes. Get medical attention. Wash clothing before reuse. Clean shoes thoroughly before reuse.
- Ingestion** : Get medical attention immediately. Call a poison center or physician. Wash out mouth with water. Remove dentures if any. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Stop if the exposed person feels sick as vomiting may be dangerous. Aspiration hazard if swallowed. Can enter lungs and cause damage. Do not induce vomiting. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Never give anything by mouth to an unconscious person. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

Most important symptoms/effects, acute and delayed

Potential acute health effects

- Eye contact** : Causes serious eye irritation.
- Inhalation** : No known significant effects or critical hazards.
- Skin contact** : Causes skin irritation.
- Ingestion** : May be fatal if swallowed and enters airways.

Over-exposure signs/symptoms

- Eye contact** : Adverse symptoms may include the following:
pain or irritation
watering
redness
- Inhalation** : No specific data.
- Skin contact** : Adverse symptoms may include the following:
irritation
redness
- Ingestion** : Adverse symptoms may include the following:
nausea or vomiting

Indication of immediate medical attention and special treatment needed, if necessary

- Notes to physician** : Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.
- Specific treatments** : No specific treatment.
- Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation.

See toxicological information (Section 11)

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media : Use dry chemical, CO₂, water spray (fog) or foam.

Unsuitable extinguishing media : Do not use water jet.

Specific hazards arising from the chemical : Flammable liquid and vapor. Runoff to sewer may create fire or explosion hazard. In a fire or if heated, a pressure increase will occur and the container may burst, with the risk of a subsequent explosion. The vapor/gas is heavier than air and will spread along the ground. Vapors may accumulate in low or confined areas or travel a considerable distance to a source of ignition and flash back.

Hazardous thermal decomposition products : Decomposition products may include the following materials:
carbon dioxide
carbon monoxide
phosphorus oxides
halogenated compounds
metal oxide/oxides

Special protective actions for fire-fighters : Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters : Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode.

Remark : Flammable liquid.

Section 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

For non-emergency personnel : No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing vapor or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

For emergency responders : If specialized clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For non-emergency personnel".

Environmental precautions : Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

Methods and materials for containment and cleaning up

Small spill : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Dilute with water and mop up if water-soluble. Alternatively, or if water-insoluble, absorb with an inert dry material and place in an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Section 6. Accidental release measures

Large spill

- : Stop leak if without risk. Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Contain and collect spillage with non-combustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations (see Section 13). Dispose of via a licensed waste disposal contractor. Contaminated absorbent material may pose the same hazard as the spilled product. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

- : Put on appropriate personal protective equipment (see Section 8). Avoid exposure - obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not swallow. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Do not enter storage areas and confined spaces unless adequately ventilated. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Store and use away from heat, sparks, open flame or any other ignition source. Use explosion-proof electrical (ventilating, lighting and material handling) equipment. Use only non-sparking tools. Take precautionary measures against electrostatic discharges. Empty containers retain product residue and can be hazardous. Do not reuse container.

Advice on general occupational hygiene

- : Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Conditions for safe storage, including any incompatibilities

- : Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Store locked up. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits (OSHA United States)

| Ingredient name | CAS # | Exposure limits |
|-----------------------|-----------|---|
| Iron Oxide | 1309-37-1 | NIOSH REL (United States, 10/2020). TWA: 5 mg/m ³ , (as Fe) 10 hours. Form: Dust and fumes ACGIH TLV (United States, 1/2023). TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction OSHA PEL (United States, 5/2018). TWA: 5 mg/m ³ 8 hours. Form: Respirable fraction TWA: 15 mg/m ³ 8 hours. Form: Total dust |
| Xylene, mixed isomers | 1330-20-7 | OSHA PEL (United States, 5/2018). [Xylenes (o-, m-, p-isomers)] TWA: 100 ppm 8 hours. |

Date of issue/Date of revision

: 4/19/2024

Date of previous issue

: 1/22/2024

Version : 27

5/18

B59A226

Heat-Flex® Hi-Temp 1200
Dark Gray

SHW-85-NA-GHS-US

Section 8. Exposure controls/personal protection

| | | |
|--|------------------------|---|
| Heavy Aromatic Naphtha Ethylbenzene | 64742-94-5 100-41-4 | <p>TWA: 435 mg/m³ 8 hours. ACGIH TLV (United States, 1/2023). [p-xylene and mixtures containing p-xylene] Ototoxicant. TWA: 20 ppm 8 hours. None. ACGIH TLV (United States, 1/2023). Ototoxicant. TWA: 20 ppm 8 hours. NIOSH REL (United States, 10/2020). TWA: 100 ppm 10 hours. TWA: 435 mg/m³ 10 hours. STEL: 125 ppm 15 minutes. STEL: 545 mg/m³ 15 minutes. OSHA PEL (United States, 5/2018). TWA: 100 ppm 8 hours. TWA: 435 mg/m³ 8 hours.</p> |
| Aluminum Orthophosphate | 7784-30-7 | <p>ACGIH TLV (United States, 1/2023). [Aluminum, metal and insoluble compounds] TWA: 1 mg/m³ 8 hours. Form: Respirable fraction</p> |
| Methyl n-Amyl Ketone | 110-43-0 | <p>ACGIH TLV (United States, 1/2023). TWA: 50 ppm 8 hours. TWA: 233 mg/m³ 8 hours. NIOSH REL (United States, 10/2020). TWA: 100 ppm 10 hours. TWA: 465 mg/m³ 10 hours. OSHA PEL (United States, 5/2018). TWA: 100 ppm 8 hours. TWA: 465 mg/m³ 8 hours.</p> |
| Mica | 12001-26-2 | <p>ACGIH TLV (United States, 1/2023). TWA: 0.1 mg/m³ 8 hours. Form: Respirable fraction NIOSH REL (United States, 10/2020). TWA: 3 mg/m³ 10 hours. Form: Respirable fraction OSHA PEL Z3 (United States, 6/2016). TWA: 20 mppcf 8 hours.</p> |
| Naphthalene | 91-20-3 | <p>ACGIH TLV (United States, 1/2023). Absorbed through skin. TWA: 10 ppm 8 hours. TWA: 52 mg/m³ 8 hours. NIOSH REL (United States, 10/2020). TWA: 10 ppm 10 hours. TWA: 50 mg/m³ 10 hours. STEL: 15 ppm 15 minutes. STEL: 75 mg/m³ 15 minutes. OSHA PEL (United States, 5/2018). TWA: 10 ppm 8 hours. TWA: 50 mg/m³ 8 hours.</p> |

[Occupational exposure limits \(Canada\)](#)

Section 8. Exposure controls/personal protection

| Ingredient name | CAS # | Exposure limits |
|----------------------|-----------|---|
| Xylene | 1330-20-7 | <p>CA Alberta Provincial (Canada, 6/2018). [Dimethylbenzene (o,m & p isomers)] 8 hrs OEL: 100 ppm 8 hours. 15 min OEL: 651 mg/m³ 15 minutes. 15 min OEL: 150 ppm 15 minutes. 8 hrs OEL: 434 mg/m³ 8 hours.</p> <p>CA British Columbia Provincial (Canada, 6/2022). [Xylene (o, m & p isomers)] TWA: 100 ppm 8 hours. STEL: 150 ppm 15 minutes.</p> <p>CA Quebec Provincial (Canada, 6/2022). [Xylene (o-,m-,p- isomers)] TWA: 100 ppm 8 hours. TWA: 434 mg/m³ 8 hours. STEL: 150 ppm 15 minutes. STEL: 651 mg/m³ 15 minutes.</p> <p>CA Ontario Provincial (Canada, 6/2019). [Xylene (o-, m-, p-isomers)] STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours.</p> <p>CA Saskatchewan Provincial (Canada, 7/2013). [Xylene (o, m-, p-isomers)] STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours.</p> |
| Ethylbenzene | 100-41-4 | <p>CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 100 ppm 8 hours. 8 hrs OEL: 434 mg/m³ 8 hours. 15 min OEL: 543 mg/m³ 15 minutes. 15 min OEL: 125 ppm 15 minutes.</p> <p>CA British Columbia Provincial (Canada, 6/2022). TWA: 20 ppm 8 hours.</p> <p>CA Ontario Provincial (Canada, 6/2019). TWA: 20 ppm 8 hours.</p> <p>CA Quebec Provincial (Canada, 6/2022). TWA: 20 ppm 8 hours.</p> <p>CA Saskatchewan Provincial (Canada, 7/2013). STEL: 125 ppm 15 minutes. TWA: 100 ppm 8 hours.</p> |
| Methyl n-amyl ketone | 110-43-0 | <p>CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 233 mg/m³ 8 hours. 8 hrs OEL: 50 ppm 8 hours.</p> <p>CA British Columbia Provincial (Canada, 6/2022). TWA: 50 ppm 8 hours.</p> <p>CA Ontario Provincial (Canada, 6/2019). TWA: 25 ppm 8 hours. TWA: 115 mg/m³ 8 hours.</p> <p>CA Quebec Provincial (Canada, 6/2022). TWA: 50 ppm 8 hours. TWA: 233 mg/m³ 8 hours.</p> <p>CA Saskatchewan Provincial (Canada, 7/2013). STEL: 60 ppm 15 minutes.</p> |

Section 8. Exposure controls/personal protection

| | | |
|-------------|-----------|---|
| Naphthalene | 91-20-3 | <p>TWA: 50 ppm 8 hours. CA Alberta Provincial (Canada, 6/2018). Absorbed through skin. 15 min OEL: 15 ppm 15 minutes. 8 hrs OEL: 10 ppm 8 hours. 8 hrs OEL: 52 mg/m³ 8 hours. 15 min OEL: 79 mg/m³ 15 minutes. CA British Columbia Provincial (Canada, 6/2022). Absorbed through skin. TWA: 10 ppm 8 hours. CA Ontario Provincial (Canada, 6/2019). Absorbed through skin. TWA: 10 ppm 8 hours. CA Quebec Provincial (Canada, 6/2022). Absorbed through skin. TWAEV: 10 ppm 8 hours. CA Saskatchewan Provincial (Canada, 7/2013). Absorbed through skin. STEL: 15 ppm 15 minutes. TWA: 10 ppm 8 hours.</p> |
| Kaolin | 1332-58-7 | <p>CA Alberta Provincial (Canada, 6/2018). 8 hrs OEL: 2 mg/m³ 8 hours. Form: Respirable CA Quebec Provincial (Canada, 6/2022). TWAEV: 2 mg/m³ 8 hours. Form: Respirable dust. CA Ontario Provincial (Canada, 6/2019). TWA: 2 mg/m³ 8 hours. Form: Respirable particulate matter. CA Saskatchewan Provincial (Canada, 7/2013). STEL: 4 mg/m³ 15 minutes. Form: respirable fraction TWA: 2 mg/m³ 8 hours. Form: respirable fraction CA British Columbia Provincial (Canada, 6/2022). Notes: the value is for particulate matter containing no asbestos and less than 1% crystalline silica. TWA: 2 mg/m³ 8 hours. Form: Respirable</p> |

Occupational exposure limits (Mexico)

| | CAS # | Exposure limits |
|-----------------------|-----------|--|
| Xylene, mixed isomers | 1330-20-7 | <p>NOM-010-STPS-2014 (Mexico, 4/2016). [Xylenes (mixed)] STEL: 150 ppm 15 minutes. TWA: 100 ppm 8 hours.</p> |
| Ethylbenzene | 100-41-4 | <p>NOM-010-STPS-2014 (Mexico, 4/2016). TWA: 20 ppm 8 hours.</p> |
| Methyl n-Amyl Ketone | 110-43-0 | <p>NOM-010-STPS-2014 (Mexico, 4/2016). TWA: 50 ppm 8 hours.</p> |
| Naphthalene | 91-20-3 | <p>NOM-010-STPS-2014 (Mexico, 4/2016). Absorbed through skin. TWA: 10 ppm 8 hours. STEL: 15 ppm 15 minutes.</p> |

Biological exposure indices (United States)

| | | | | | | |
|---------------------------------------|--------------------------------------|-------------------------------|-------------|------------------|------|------|
| Date of issue/Date of revision | : 4/19/2024 | Date of previous issue | : 1/22/2024 | Version | : 27 | 8/18 |
| B59A226 | Heat-Flex® Hi-Temp 1200 Dark Gray | | | SHW-85-NA-GHS-US | | |

Section 8. Exposure controls/personal protection

| Ingredient name | Exposure indices |
|-----------------------|--|
| Xylene, mixed isomers | ACGIH BEI (United States, 1/2023) [xylenes (technical or commercial grade)] BEI: 1.5 g/g creatinine, methylhippuric acids [in urine]. Sampling time: end of shift. |
| Ethylbenzene | ACGIH BEI (United States, 1/2023) BEI: 0.15 g/g creatinine, sum of mandelic acid and phenylglyoxylic acid [in urine]. Sampling time: end of shift. |
| Naphthalene | ACGIH BEI (United States, 1/2023) BEI: Nonquantitative: Biological monitoring should be considered for this compound based on the review; however, a specific BEI® could not be determined due to insufficient data., 1-naphthol + 2-naphthol [(sample not specified)]. Sampling time: end of shift. |

Biological exposure indices (Canada)

No exposure indices known.

Biological exposure indices (Mexico)

| Ingredient name | Exposure indices |
|-----------------------|---|
| Xylene, mixed isomers | Official Mexican STANDARD NOM-047-SSA1-2011, Environmental Health-Biological exposure indices for personnel occupationally exposed to chemical substances. (Mexico, 6/2012) [xylenes (technical or commercial grade)] BEI: 1.5 g/g creatinine, methyl hippuric acids [in urine]. Sampling time: at the end of the work shift. |
| Ethylbenzene | Official Mexican STANDARD NOM-047-SSA1-2011, Environmental Health-Biological exposure indices for personnel occupationally exposed to chemical substances. (Mexico, 6/2012) BEI: 0.7 g/g creatinine [non-specific. The determinant is nonspecific, since it can be found after exposure to other chemicals.; semi-quantitative. The biological determinant is an indicator of chemical exposure, but the quantitative interpretation of the measure is ambiguous. These biological determinants should be used as a screening test if a quantitative test is not possible.], Sum of mandelic acid and acid phenylglyoxylic [in urine]. Sampling time: at the end of the shift at the end of the work week. BEI: semi-quantitative. The biological determinant is an indicator of chemical exposure, but the quantitative interpretation of the measure is ambiguous. These biological determinants should be used as a screening |

Section 8. Exposure controls/personal protection

test if a quantitative test is not possible., ethylbenzene [in exhaled air]. Sampling time: uncritical.

Appropriate engineering controls : Use only with adequate ventilation. Use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

Environmental exposure controls : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

Individual protection measures

Hygiene measures : Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

Eye/face protection : Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles.

Skin protection

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary. Considering the parameters specified by the glove manufacturer, check during use that the gloves are still retaining their protective properties. It should be noted that the time to breakthrough for any glove material may be different for different glove manufacturers. In the case of mixtures, consisting of several substances, the protection time of the gloves cannot be accurately estimated.

Body protection : Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. When there is a risk of ignition from static electricity, wear anti-static protective clothing. For the greatest protection from static discharges, clothing should include anti-static overalls, boots and gloves.

Other skin protection : Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

Respiratory protection : Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

Section 9. Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Appearance

Physical state : Liquid.
Color : Various
Odor : Not available.
Odor threshold : Not available.
pH : Not applicable.

Date of issue/Date of revision : 4/19/2024

Date of previous issue : 1/22/2024

Version : 27

10/18

B59A226 Heat-Flex® Hi-Temp 1200
Dark Gray

SHW-85-NA-GHS-US

Section 9. Physical and chemical properties

| | |
|--|---|
| Melting point/freezing point | : Not available. |
| Boiling point, initial boiling point, and boiling range | : 136°C (276.8°F) |
| Flash point | : Closed cup: 31°C (87.8°F) [Pensky-Martens Closed Cup] |
| Evaporation rate | : 0.8 (butyl acetate = 1) |
| Flammability | : Flammable liquid. |
| Lower and upper explosion limit/flammability limit | : Lower: 0.8% Upper: 7.9% |
| Vapor pressure | : 0.95 kPa (7.1 mm Hg) |
| Relative vapor density | : 3.66 [Air = 1] |
| Relative density | : 1.94 |
| Solubility(ies) | : |

| Media | Result |
|------------|-------------|
| cold water | Not soluble |

| | |
|---|---|
| Partition coefficient: n-octanol/water | : Not applicable. |
| Auto-ignition temperature | : Not available. |
| Decomposition temperature | : Not available. |
| Viscosity | : Kinematic (40°C (104°F)): <20.5 mm²/s (<20.5 cSt) |
| Molecular weight | : Not applicable. |
| Heat of combustion | : 6.006 kJ/g |

Section 10. Stability and reactivity

| | |
|---|--|
| Reactivity | : No specific test data related to reactivity available for this product or its ingredients. |
| Chemical stability | : The product is stable. |
| Possibility of hazardous reactions | : Under normal conditions of storage and use, hazardous reactions will not occur. |
| Conditions to avoid | : Avoid all possible sources of ignition (spark or flame). Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat or sources of ignition. Do not allow vapor to accumulate in low or confined areas. |
| Incompatible materials | : Reactive or incompatible with the following materials: oxidizing materials |
| Hazardous decomposition products | : Under normal conditions of storage and use, hazardous decomposition products should not be produced. |

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Section 11. Toxicological information

| Product/ingredient name | Result | Species | Dose | Exposure |
|-------------------------|----------------------|---------|-------------|----------|
| Xylene, mixed isomers | LC50 Inhalation Gas. | Rat | 6700 ppm | 4 hours |
| Ethylbenzene | LD50 Oral | Rat | 4300 mg/kg | - |
| | LD50 Dermal | Rabbit | >5000 mg/kg | - |
| | LD50 Oral | Rat | 3500 mg/kg | - |
| Methyl n-Amyl Ketone | LD50 Oral | Rat | 1600 mg/kg | - |
| Naphthalene | LD50 Dermal | Rabbit | >20 g/kg | - |
| | LD50 Oral | Rat | 490 mg/kg | - |

Irritation/Corrosion

| Product/ingredient name | Result | Species | Score | Exposure | Observation |
|-------------------------|--------------------------|---------|-------|------------------|-------------|
| Xylene, mixed isomers | Eyes - Mild irritant | Rabbit | - | 87 mg | - |
| | Eyes - Severe irritant | Rabbit | - | 24 hours 5 mg | - |
| | Skin - Mild irritant | Rat | - | 8 hours 60 uL | - |
| | Skin - Moderate irritant | Rabbit | - | 100 % | - |
| | Skin - Moderate irritant | Rabbit | - | 24 hours 500 mg | - |
| Heavy Aromatic Naphtha | Skin - Mild irritant | Rabbit | - | 24 hours 500 uL | - |
| Ethylbenzene | Eyes - Severe irritant | Rabbit | - | 500 mg | - |
| | Skin - Mild irritant | Rabbit | - | 24 hours 15 mg | - |
| Methyl n-Amyl Ketone | Skin - Mild irritant | Rabbit | - | 24 hours 14 mg | - |
| Naphthalene | Skin - Mild irritant | Rabbit | - | 495 mg | - |
| | Skin - Severe irritant | Rabbit | - | 24 hours 0.05 MI | - |

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Classification

| Product/ingredient name | OSHA | IARC | NTP |
|-------------------------|------|------|--|
| Iron Oxide | - | 3 | - |
| Xylene, mixed isomers | - | 3 | - |
| Ethylbenzene | - | 2B | - |
| Naphthalene | - | 2B | Reasonably anticipated to be a human carcinogen. |

Reproductive toxicity

Not available.

Teratogenicity

Not available.

Specific target organ toxicity (single exposure)

Section 11. Toxicological information

| Name | Category | Route of exposure | Target organs |
|------------------------|------------|-------------------|------------------------------|
| Xylene, mixed isomers | Category 3 | - | Respiratory tract irritation |
| Heavy Aromatic Naphtha | Category 3 | - | Narcotic effects |
| Ethylbenzene | Category 3 | - | Narcotic effects |
| Methyl n-Amyl Ketone | Category 3 | - | Respiratory tract irritation |
| | Category 3 | - | Narcotic effects |

Specific target organ toxicity (repeated exposure)

| Name | Category | Route of exposure | Target organs |
|-----------------------|------------|-------------------|---------------|
| Xylene, mixed isomers | Category 2 | - | - |
| Ethylbenzene | Category 2 | - | - |
| Methyl n-Amyl Ketone | Category 2 | - | - |
| Mica | Category 1 | inhalation | lungs |

Aspiration hazard

| Name | Result |
|------------------------|--------------------------------|
| Xylene, mixed isomers | ASPIRATION HAZARD - Category 1 |
| Heavy Aromatic Naphtha | ASPIRATION HAZARD - Category 1 |
| Ethylbenzene | ASPIRATION HAZARD - Category 1 |
| Naphthalene | ASPIRATION HAZARD - Category 1 |

Information on the likely routes of exposure : Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : No known significant effects or critical hazards.

Skin contact : Causes skin irritation.

Ingestion : May be fatal if swallowed and enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

Eye contact : Adverse symptoms may include the following:
pain or irritation
watering
redness

Inhalation : No specific data.

Skin contact : Adverse symptoms may include the following:
irritation
redness

Ingestion : Adverse symptoms may include the following:
nausea or vomiting

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Section 11. Toxicological information

Long term exposure

Potential immediate effects : Not available.

Potential delayed effects : Not available.

Potential chronic health effects

Not available.

General : Causes damage to organs through prolonged or repeated exposure.

Carcinogenicity : Suspected of causing cancer. Risk of cancer depends on duration and level of exposure.

Mutagenicity : No known significant effects or critical hazards.

Teratogenicity : No known significant effects or critical hazards.

Developmental effects : No known significant effects or critical hazards.

Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

| Route | ATE value |
|---------------------|----------------|
| Oral | 22697.7 mg/kg |
| Dermal | 24957.52 mg/kg |
| Inhalation (vapors) | 227.93 mg/l |

Section 12. Ecological information

Toxicity

| Product/ingredient name | Result | Species | Exposure |
|-------------------------------------|------------------------------------|---|----------|
| Xylene, mixed isomers | Acute LC50 8500 µg/l Marine water | Crustaceans - <i>Palaemonetes pugio</i> | 48 hours |
| Ethylbenzene | Acute LC50 13400 µg/l Fresh water | Fish - <i>Pimephales promelas</i> | 96 hours |
| | Acute EC50 4900 µg/l Marine water | Algae - <i>Skeletonema costatum</i> | 72 hours |
| | Acute EC50 7700 µg/l Marine water | Algae - <i>Skeletonema costatum</i> | 96 hours |
| | Acute EC50 6.53 mg/l Marine water | Crustaceans - <i>Artemia sp.</i> - Nauplii | 48 hours |
| | Acute EC50 2.93 mg/l Fresh water | Daphnia - <i>Daphnia magna</i> - Neonate | 48 hours |
| Methyl n-Amyl Ketone Naphthalene | Acute LC50 4200 µg/l Fresh water | Fish - <i>Oncorhynchus mykiss</i> | 96 hours |
| | Acute LC50 131000 µg/l Fresh water | Fish - <i>Pimephales promelas</i> | 96 hours |
| | Acute EC50 1.6 mg/l Fresh water | Daphnia - <i>Daphnia magna</i> - Neonate | 48 hours |
| | Acute LC50 2350 µg/l Marine water | Crustaceans - <i>Palaemonetes pugio</i> | 48 hours |
| | Acute LC50 213 µg/l Fresh water | Fish - <i>Melanotaenia fluviatilis</i> - Larvae | 96 hours |
| | Chronic NOEC 0.5 mg/l Marine water | Crustaceans - <i>Uca pugnax</i> - Adult | 3 weeks |
| | Chronic NOEC 1.5 mg/l Fresh water | Fish - <i>Oreochromis mossambicus</i> | 60 days |

Persistence and degradability

Section 12. Ecological information

| Product/ingredient name | Aquatic half-life | Photolysis | Biodegradability |
|-------------------------|-------------------|------------|------------------|
| Xylene, mixed isomers | - | - | Readily |
| Ethylbenzene | - | - | Readily |
| Methyl n-Amyl Ketone | - | - | Readily |

Bioaccumulative potential

| Product/ingredient name | LogP _{ow} | BCF | Potential |
|-------------------------|--------------------|-------------|-----------|
| Xylene, mixed isomers | - | 8.1 to 25.9 | Low |
| Heavy Aromatic Naphtha | - | 99 to 5780 | High |
| Naphthalene | - | 36.5 to 168 | Low |

Mobility in soil







Soil/water partition coefficient (K_{oc}) : Not available.

Other adverse effects : No known significant effects or critical hazards.

Section 13. Disposal considerations

Disposal methods : The generation of waste should be avoided or minimized wherever possible. Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. This material and its container must be disposed of in a safe way. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Empty containers or liners may retain some product residues. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container. Do not cut, weld or grind used containers unless they have been cleaned thoroughly internally. Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

| | DOT Classification | TDG Classification | Mexico Classification | IATA | IMDG |
|----------------------------|--|--|--|--|--|
| UN number | UN1263 | UN1263 | UN1263 | UN1263 | UN1263 |
| UN proper shipping name | PAINT | PAINT | PAINT | PAINT | PAINT. Marine pollutant (Zinc Phosphate, Heavy Aromatic Naphtha) |
| Transport hazard class(es) | 3  | 3  | 3  | 3  | 3   |
| Packing group | III | III | III | III | III |
| | | | | | |

Section 14. Transport information

| | | | | | |
|-------------------------------|--|--|--|--|--|
| Environmental hazards | No. | No. | No. | Yes. The environmentally hazardous substance mark is not required. | Yes. |
| Additional information | - ERG No. 128 | Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2.18-2.19 (Class 3). ERG No. 128 | - ERG No. 128 | The environmentally hazardous substance mark may appear if required by other transportation regulations. | The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. Emergency schedules F-E, S-E |

Special precautions for user : Multi-modal shipping descriptions are provided for informational purposes and do not consider container sizes. The presence of a shipping description for a particular mode of transport (sea, air, etc.), does not indicate that the product is packaged suitably for that mode of transport. All packaging must be reviewed for suitability prior to shipment, and compliance with the applicable regulations is the sole responsibility of the person offering the product for transport. People loading and unloading dangerous goods must be trained on all of the risks deriving from the substances and on all actions in case of emergency situations.

Transport in bulk according to IMO instruments : Not available.

Proper shipping name : Not available.

Section 15. Regulatory information

TSCA 5(a)2 proposed significant new use rules: 1-Methyl-2-Pyrrolidone

SARA 313

SARA 313 (40 CFR 372.45) supplier notification can be found on the Environmental Data Sheet, where applicable.

California Prop. 65

WARNING: This product contains chemicals known to the State of California to cause cancer and birth defects or other reproductive harm.

International regulations

Montreal Protocol

Not listed.

Stockholm Convention on Persistent Organic Pollutants

Not listed.

Section 15. Regulatory information

International lists : Australia inventory (AIIIC): Not determined.
China inventory (IECSC): Not determined.
Japan inventory (CSCL): Not determined.
Japan inventory (ISHL): Not determined.
Korea inventory (KECI): Not determined.
New Zealand Inventory of Chemicals (NZIoC): Not determined.
Philippines inventory (PICCS): Not determined.
Taiwan Chemical Substances Inventory (TCSI): Not determined.
Thailand inventory: Not determined.
Turkey inventory: Not determined.
Vietnam inventory: Not determined.

Section 16. Other information

Hazardous Material Information System (U.S.A.)

| | | |
|------------------|---|---|
| Health | * | 3 |
| Flammability | | 3 |
| Physical hazards | | 0 |
| | | |

The customer is responsible for determining the PPE code for this material. For more information on HMIS® Personal Protective Equipment (PPE) codes, consult the HMIS® Implementation Manual.

Caution: HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings and the associated label are not required on SDSs or products leaving a facility under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® ratings are to be used with a fully implemented HMIS® program. HMIS® is a registered trademark and service mark of the American Coatings Association, Inc.

Procedure used to derive the classification

| Classification | Justification |
|---|-----------------------|
| FLAMMABLE LIQUIDS - Category 3 | On basis of test data |
| SKIN CORROSION/IRRITATION - Category 2 | Calculation method |
| SERIOUS EYE DAMAGE/ EYE IRRITATION - Category 2A | Calculation method |
| CARCINOGENICITY - Category 2 | Calculation method |
| SPECIFIC TARGET ORGAN TOXICITY (REPEATED EXPOSURE) - Category 1 | Calculation method |
| ASPIRATION HAZARD - Category 1 | Calculation method |

History

Date of printing : 4/19/2024

Date of issue/Date of revision : 4/19/2024

Date of previous issue : 1/22/2024

Version : 27

Key to abbreviations : ATE = Acute Toxicity Estimate
BCF = Bioconcentration Factor
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
IBC = Intermediate Bulk Container
IMDG = International Maritime Dangerous Goods
LogPow = logarithm of the octanol/water partition coefficient
MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
N/A = Not available
SGG = Segregation Group
UN = United Nations

Section 16. Other information

 Indicates information that has changed from previously issued version.

Notice to reader

It is recommended that each customer or recipient of this Safety Data Sheet (SDS) study it carefully and consult resources, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with the product. This information is provided in good faith and believed to be accurate as of the effective date herein. However, no warranty, express or implied, is given. The information presented here applies only to the product as shipped. The addition of any material can change the composition, hazards and risks of the product. Products shall not be repackaged, modified, or tinted except as specifically instructed by the manufacturer, including but not limited to the incorporation of products not specified by the manufacturer, or the use or addition of products in proportions not specified by the manufacturer. Regulatory requirements are subject to change and may differ between various locations and jurisdictions. The customer/buyer/user is responsible to ensure that his activities comply with all country, federal, state, provincial or local laws. The conditions for use of the product are not under the control of the manufacturer; the customer/buyer/user is responsible to determine the conditions necessary for the safe use of this product. The customer/buyer/user should not use the product for any purpose other than the purpose shown in the applicable section of this SDS without first referring to the supplier and obtaining written handling instructions. Due to the proliferation of sources for information such as manufacturer-specific SDS, the manufacturer cannot be responsible for SDSs obtained from any other source.