

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

1.1 Product identifier

Product name: Crown TuffStrip Heavy-Duty Stripper

SDS number: CR.TSMCF

Synonym(s): Hydrocarbon solvent blend, Tuff Strip Paint Remover, Non-Methylene Chloride Paint Remover Heavy Duty Stripper

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

General use: Paint stripper

Uses advised against: None specified

1.3 Details of the supplier and of the safety data sheet

Manufacturer/Distributor

SolvChem Consumer Products

1904 Mykawa Road

Pearland, TX 77581-3210 USA

1-281-485-1458

1.4 Emergency telephone number

CHEMTREC: 1-800-424-9300 (USA)

CANUTEC: 1-613-996-6666 (Canada)

SECTION 2 - HAZARDS IDENTIFICATION

2.1 Classification of substance or mixture

Product definition: Mixture

Classification in accordance with 29 CFR 1910 (OSHA HCS) and Regulation EC No. 1272/2008

Flammable Liquid - Category 4 [H227]

Acute Toxicity, Oral - Category 5 [H303]

Aspiration Hazard - Category 1 [H304]

Acute Toxicity, Dermal - Category 5 [H313]

Skin Irritation - Category 2 [H315]

Sensitizer, Skin - Category 1 [H317]

Eye Irritation - Category 2A [H319]

Acute Toxicity, Inhalation - Category 4 [H332]

Specific Target Organ Toxicity, Single Exposure - Category 3; STOT SE 3 [H336]

Carcinogenicity - Category 2 [H351]

Reproductive Toxicity - Category 1B [H360d]

Aquatic Toxicity, Chronic - Category 2 [H411]

2.2 Label elements

Hazard symbol(s):



GHS07



GHS08



GHS09

Signal word:

Warning

Hazard statement(s):

H227 - Combustible liquid
H303 - May be harmful if swallowed
H304 - May be fatal if swallowed and enters airways
H313 - May be harmful in contact with skin
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction
H319 - Causes serious eye irritation
H332 - Harmful if inhaled
H335 - May cause respiratory irritation
H351 - Suspected of causing cancer
H360d - May damage the unborn child
H411 - Toxic to aquatic life with long lasting effects

Precautionary statements

[Prevention]

P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P210 - Keep away from heat, open flames and hot surface. No smoking.
P261 - Avoid breathing mist or vapor.
P264 - Wash hands and other exposed skin areas thoroughly after handling.
P271 - Use only outdoors or in a well-ventilated area.
P272 - Contaminated work clothing should not be allowed out of the workplace.

[Response]	P273 - Avoid release to the environment.
	P280 - Wear protective gloves, protective clothing and eye protection.
	P301 + P331 + P310 - IF SWALLOWED: DO NOT induce vomiting. Immediately call a POISON CENTER or doctor.
	P302 + P352 - IF ON SKIN: Wash with plenty of soap and water.
	P304 + P340 + P312 - IF INHALED: Remove victim to fresh air and keep at rest in a comfortable position for breathing. Call a POISON CENTER or doctor if you feel unwell.
	P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P308 + P313 - If exposed or concerned: Get medical attention.
	P321 + P312 - Specific treatment: Call a POISON CENTER or doctor if you feel unwell. Refer to Section 4 of this SDS.
	P333 + P337 + P313 - If skin irritation or rash occurs or eye irritation persists: Get medical attention.
	P362 - Take off contaminated clothing and wash before reuse.
[Storage]	P370 + P378 - In case of fire: Use water fog, foam, dry chemical or carbon dioxide for extinction.
	P391 - Collect spillage.
[Disposal]	P405 + P403 + P233 + P235 - Store locked up in a well-ventilated place. Keep container tightly closed. Keep cool.
	P501 - Dispose of contents and containers in accordance with national and local regulations.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS

Repeated exposure may cause skin dryness or cracking

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable

3.2 Mixtures

% by Weight	Ingredient	CAS Number	EC Number	Index Number	GHS Classification
20 - 55	Solvent naphtha (petroleum), heavy aromatic	64742-94-5	265-198-5	649-424-00-3	H227, H304, H336, H351, 411
5 - 20	Dimethylformamide	68-12-2	200-679-5	616-001-00-X	H226, H312, H319, H332, H360d
1 - 10	Dimethyl sulfoxide	67-68-5	200-664-3	-----	H227
0.5 - 3	d-Limonene	5989-27-5	227-813-5	601-029-00-7	H226, H315, H317, H412
0 - 0.3	Naphthalene	91-20-3	202-049-5	601-052-00-2	H302, H351, H410

As per paragraph (i) of 29 CFR 1910.1200, formulation is considered a trade secret and specific chemical identity and exact percentage (concentration) of composition may have been withheld. Specific chemical identity and exact percentage composition will be provided to health professionals, employees, or designated representatives in accordance with the applicable provisions of paragraph (i).

There are no additional ingredients present in this product which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

SECTION 4 – FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation: If product mist or vapor causes respiratory irritation or distress, move the exposed person to fresh air immediately. If breathing is difficult or irregular, administer oxygen; if respiratory arrest occurs, start artificial respiration by trained personnel. If unconscious, maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband. If symptoms persist or if the victim feels unwell, seek medical attention.

Eyes: Immediately flush eyes with large amounts of water or saline solution for at least 15 minutes, occasionally lifting the upper and lower lids. Remove contact lenses, if present and easy to do, after first 2 minutes and continue rinsing. If eye irritation persists seek medical attention, preferably from an ophthalmologist.

Skin: Flush skin with large amounts of water while removing contaminated clothing. Wash the affected area with soap and water followed by thorough rinsing. Wash contaminated clothing and shoes before reuse. If irritation persists or if the victim feels unwell, seek medical attention.

Ingestion: Rinse mouth with water if the victim is conscious. Remove dentures if present. DO NOT induce vomiting unless directed to do so by medical personnel. Vomiting may occur spontaneously. To prevent aspiration of material into the lungs, lay the victim on one side with the head lower than the waist. Never give anything by mouth to an unconscious or convulsing person. Do not leave the victim unattended. Seek immediate medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Potential health symptoms and effects

Eyes: Causes severe eye irritation. Symptoms may include inflammation, swelling, pain, tearing and blurred vision. Vapor or mist can cause eye irritation.

Skin: Causes skin irritation with localized redness, itching and discomfort. Prolonged contact with unprotected skin may cause defatting of the skin and/or dermatitis. May cause an allergic skin reaction in susceptible individuals. Harmful if absorbed through the skin.

Inhalation: Harmful if inhaled. May cause respiratory tract irritation with headache, cough and shortness of breath. May cause central nervous effects, including dizziness, drowsiness, nausea, vomiting, weakness, loss of coordination, blurred vision, confusion, disorientation or stupor. At extreme exposures, central nervous system effects may include respiratory depression, tremors or convulsions, loss of consciousness, coma or death. May cause an allergic asthma-like response in some individuals.

Ingestion: May be harmful if swallowed. Causes irritation of the digestive tract with nausea, vomiting, abdominal pain and diarrhea. Causes

dizziness, drowsiness, weakness, fatigue, headache and unconsciousness. May cause central nervous system depression with effects similar to those of acute inhalation. This material can get into the lungs during swallowing or vomiting causing lung inflammation and chemical pneumonitis, which may be fatal. Symptoms of aspiration into the lungs include coughing, gasping, choking, shortness of breath, bluish colored skin, rapid breathing and rapid heart rate.

Chronic Prolonged or repeated skin contact may cause defatting of the skin and dermatitis or aggravate existing skin conditions. May cause an allergic skin reaction in some individuals. Chronic inhalation, skin absorption or ingestion may cause damage to the central nervous system and impair respiratory or pulmonary function. May cause damage to the liver and kidneys. Naphthalene is a possible human carcinogen. Dimethylformamide is probably carcinogenic to humans. Exposure to this product may damage the unborn child. Refer to Section 11.2.

4.3 Indication of any immediate medical attention and special treatment needed

Advice to doctor and hospital personnel

Administration of adsorbents such as activated charcoal may be of value. Gastric lavage may be effective when performed by a physician within 4 hours of ingestion. This material is an aspiration hazard. Potential danger from aspiration must be weighed against possible oral toxicity when deciding whether to induce vomiting.

SECTION 5 – FIRE FIGHTING MEASURES

5.1 Extinguishing media

Suitable methods of extinction: Use extinguishing media such as water spray or fog, carbon dioxide, foam and dry chemical.

Unsuitable methods of extinction: Water jets or streams may spread the fire.

5.2 Special hazards arising from the substance or mixture

Combustible liquid! Vapors are heavier than air and can travel along the ground to a source of ignition and flash back. Vapors can spread along the ground and collect in low or confined areas. Exposure to ignition sources may ignite vapors, causing a flash fire. Closed containers may explode due to the buildup of pressure when exposed to extreme heat. During emergency conditions overexposure to decomposition products may cause a health hazard. Symptoms may not be immediately apparent or may be delayed. Obtain medical attention.

Explosion hazards: Avoid sources of ignition. Vapors may form an explosive mixture with air, especially in confined spaces. Ground and bond containers in storage and when container is in use.

5.3 Advice to firefighters

Firefighters should wear full bunker gear including NIOSH-approved positive pressure self-contained breathing apparatus to protect against potential hazardous combustion or decomposition products and oxygen deficiencies. Water may be used to cool closed containers to prevent pressure buildup and possible autoignition or explosion when exposed to extreme heat. *Be aware that burning liquid may float on water.*

Firefighters must control runoff to prevent environmental contamination. Notify appropriate authorities of potential fire and explosion hazard if liquid enters sewers or waterways.

SECTION 6 – ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Evacuate non-essential personnel. Wear appropriate protective clothing and equipment designated in Section 8.2. Ventilate the area. Remove all sources of ignition. NO SMOKING. Clean up spills immediately. Spills create a slip hazard.

6.2 Environmental precautions

Avoid dispersal of spilled material or runoff and prevent contact with soil and entry into drains, sewers or waterways. Use water sparingly to minimize environmental contamination and reduce disposal requirements.

6.3 Methods and materials for containment and cleaning up

Approach spill from upwind direction. DO NOT FLUSH SPILL DOWN THE DRAIN. Cover drains and contain spill. Cover spill with a large quantity of inert absorbent. Do not use combustible material such as sawdust. Collect material using non-sparking tools and place into an approved container for proper disposal. Observe possible material restrictions (Sections 7.2 and 10.5). Do not allow material or runoff from rinsing contaminated areas to enter floor drains or storm drains and ditches that lead to waterways. Dispose of contents and containers via a licensed waste disposal contractor.

Solvent naphtha (petroleum) heavy aromatic is classified as oil under Section 311 of the Clean Water Act (CWA) and under the Oil Pollution Act (OPA). In the USA discharges or spills of material on waters of the United States, their adjoining shorelines or into conduits leading to surface waters must be reported to the National Response Center at 800-424-8802.

6.4 Reference to other sections

For indications about waste treatment, see Section 13.

SECTION 7 – STORAGE AND HANDLING

7.1 Precautions for safe handling

Wear all appropriate personal protective equipment specified in Section 8.2. Do not get in eyes or on skin or clothing. Do not inhale mist or vapor. NO SMOKING. If normal use of material presents a respiratory hazard, use only adequate ventilation or wear an appropriate respirator. Open containers slowly to control possible pressure release. Wash contaminated clothing and shoes thoroughly before reuse.

Advice on protection against fire and explosion

Keep away from heat and sources of ignition. To avoid fire or explosion, dissipate static electricity during transfer by grounding and bonding containers and equipment before transferring material.

7.2 Conditions for safe storage, including any incompatibilities

Store in dry, cool, well-ventilated areas away from incompatible materials (see Section 10.5), food and drink. Keep away from heat and ignition

sources. Transfer only to approved containers having correct labeling. Keep containers tightly closed when not in use. Protect containers against physical damage. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Containers are hazardous when empty as they contain product residue. Do not cut, drill, weld, braze, solder grind or perform similar operations on or near empty containers. Use appropriate containment to avoid environmental contamination. Ventilate closed areas. Keep out of reach of children.

7.3 Specific end uses

Apart from the uses mentioned in Section 1.2, no other specific uses are stipulated.

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Occupational exposure limit values

CAS Number	Ingredient	OSHA PEL	ACGIH TLV	NIOSH
68-12-2	Dimethylformamide	10 ppm; 30 mg/m ³ TWA; Skin	10 ppm; 30 mg/m ³ TWA; Skin	10 ppm; 30 mg/m ³ TWA; Skin 500 ppm IDLH
91-20-3	Naphthalene	10 ppm; 50 mg/m ³ TWA	400 ppm; 941 mg/m ³ TWA 10 ppm; 52 mg/m ³ STEL Skin	10 ppm; 50 mg/m ³ TWA 15 ppm; 75 mg/m ³ STEL 250 ppm IDLH
64742-94-5	Solvent Naphtha (petroleum), heavy aromatic	100 ppm; 400 mg/m ³ TWA	-----	-----

A "skin" notation following the inhalation exposure guideline refers to the potential for dermal absorption of the material, including eyes and mucous membranes, either by direct contact with vapors or by direct skin contact. It is intended to alert the reader that inhalation may not be the only route of exposure and that measures to minimize dermal exposure should be considered.

8.2 Exposure controls

Engineering measures: Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. Use adequate ventilation. Local exhaust is preferable. Refer to Section 7.1.

Individual protection measures: Wear protective clothing to prevent repeated or prolonged contact with product. Protective clothing needs to be selected specifically for the workplace, depending on concentrations and quantities of hazardous substances handled. The chemical resistance of the protective equipment should be enquired at the representative supplier.

Hygiene measures: Facilities storing or using this material should be equipped with an eyewash station and safety shower. Change contaminated clothing. Preventive skin protection is recommended. Wash hands thoroughly after use, before eating, drinking, smoking or using the lavatory.

Eye/face protection: Wear safety glasses with unperforated side shields or chemical splash goggles during use.

Hand protection: Wear butyl rubber gloves or those recommended by glove supplier for protection against materials in Section 3. Gloves should be impermeable to chemicals and oil. Breakthrough time of selected gloves must be greater than the intended use period.

Skin protection: Wear protective clothing. Wear protective boots if the situation requires.

Respiratory protection: Always use an approved respirator when vapor/aerosols exceed permissible exposure limits. Where risk assessment shows air-purifying respirators are appropriate use a half-mask respirator with multi-purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU). Follow OSHA respirator regulations found in 29 CFR 1910.134 or European Standard EN 149.

Environmental exposure controls: Do not empty into drains.

PPE must not be considered a long-term solution to exposure control. PPE usage must be accompanied by employer programs to properly select, maintain, clean fit and use. Consult a competent industrial hygiene resource to determine hazard potential and/or the PPE manufacturers to ensure adequate protection.



SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Clear, yellow viscous liquid
Odor	Characteristic
Odor Threshold	No data available
Molecular Weight	Not applicable
Chemical Formula	Not applicable
pH	No data available
Freezing/Melting Point	No data available
Boiling Point Range	153 - 340 °C (307 - 646 °F)
Evaporation Rate	No data available
Flammability (solid, gas)	No data available
Flash Point	71.1 °C (159.98 °F) PMCC

Autoignition Temperature	No data available
Decomposition Temperature	No data available
Lower Explosive Limit (LEL)	No data available
Upper Explosive Limit (UEL)	No data available
Vapor Pressure	No data available
Vapor Density	No data available
Specific Gravity	1.1000
Density	1.095 - 1.105 g/ml (9.14 - 9.22 lb/gal)
Viscosity	No data available
Solubility in Water	Negligible
Partition Coefficient (n-octanol/water)	$\log P_{ow} = -1.01 - 6$
Oxidizing Properties	Not applicable
Explosive Properties	Not applicable
Volatiles by Weight @ 21 °C	>95%

9.2 Other Data

Flammability Classification	IIIA
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SECTION 10 – STABILITY AND REACTIVITY

10.1 Reactivity

This material is stable under normal handling conditions and use.

10.2 Chemical Stability

This material is stable under recommended storage and handling conditions.

10.3 Possibility of hazardous reactions

Vapor may form an explosive mixture with air. Hazardous polymerization will not occur.

10.4 Conditions to avoid

Avoid high temperatures, sources of ignition, hot surfaces and contact with incompatible materials.

10.5 Incompatible materials

Strong oxidizing agents, strong acids, strong reducing agents, halogens and halogenated compounds, copper and copper alloys, tin

10.6 Hazardous decomposition products

Thermal decomposition products include oxides of carbon, nitrogen oxides (NO_x), sulfur oxides, hydrocarbons/hydrocarbon fragments, toxic fumes and gases.

SECTION 11 – TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute oral toxicity

LD₅₀, rat: > 4,149 mg/kg [calculated]

Acute inhalation toxicity

LC₅₀, rat: > 7.3 mg/l, 4 h [calculated]

Acute dermal toxicity

LD₅₀, rabbit: > 2,004 mg/kg [calculated]

Skin irritation

Causes skin irritation.

Eye irritation

Causes severe eye irritation.

Sensitization

May cause an allergic skin reaction.

Carcinogenicity

Suspected of causing cancer.

Germ cell mutagenicity

No data available

Reproductive toxicity

May damage fertility or the unborn child.

Specific organ toxicity - single exposure

May cause respiratory irritation, drowsiness or dizziness.

Specific organ toxicity - repeated exposure

No data available

Aspiration hazard

May be fatal if swallowed and enters the airways.

11.2 Further information

Dimethylformamide (CAS #68-12-2): IARC Group 2A carcinogen – *Probably carcinogenic to humans*. Not listed as a carcinogen by ACGIH, NTP or OSHA. Intolerance for alcohol can occur up to 4 days after dimethylformamide exposure. It is considered to be a potent liver toxin. The reproductive effects of DMF in humans have not been adequately studied. However, DMF is known to have induced malformation in the offspring of mice.

Dimethyl Sulfoxide (CAS #67-68-5) may accelerate skin absorption of other materials.

Naphthalene (CAS #91-20-3): IARC, Group 2B carcinogen - *Possibly carcinogenic to humans*; ACGIH, A3 - *Confirmed animal carcinogen with unknown relevance to humans*. Not listed as a carcinogen by NTP or OSHA.

Terpene Hydrocarbons (CAS #5989-27-5): IARC, Group 3 carcinogen - *Not classifiable as to its carcinogenicity to humans*. Not listed as a carcinogen by ACGIH, NTP or OSHA.

Handle in accordance with good industrial hygiene and safety practice.

SECTION 12 - ECOLOGICAL INFORMATION

12.1 Toxicity

This material is toxic to aquatic life with long lasting effects.

12.2 Persistence and degradability

This product is expected to biodegrade over time.

12.3 Bioaccumulation potential

Solvent naphtha (petroleum) heavy aromatic has the potential to bioaccumulate.

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

No data available

12.6 Other effects

Additional ecological information

Do not allow material to run into surface waters, wastewater or soil.

An environmental hazard cannot be excluded in the event of unprofessional handling or disposal.

SECTION 13 – DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Methods of disposal: The generation of waste should be avoided or minimized whenever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

RCRA F-Series: No listings above the reportable threshold (de minimis)

RCRA U-Series: Naphthalene (CAS #91-20-3), U165

SECTION 14 – TRANSPORTATION INFORMATION

Note: Transportation information provided is for reference only. Customer is urged to consult 49 CFR 100 - 177, IMDG, IATA, EC, United Nations TDG and WHMIS (Canada) TDG information manuals for detailed regulations and exceptions covering specific container sizes, packaging materials and methods of shipping.

DOT: A flammable liquid with a flash point at or above 38 °C (100 °F) that does not meet the definition of any other hazard class may be reclassified as a combustible liquid. This provision does not apply to transportation by vessel or aircraft, except where other means of transportation are impracticable.

DOT: May be reclassified as not regulated for transport in non-bulk packages having a maximum capacity less than or equal to 450 liters (119 gallons).

Limited quantity for miscellaneous materials in Packing Group III when inner packagings are not over 5.0 liters (1.3 gallons) net capacity each, packed in a strong outer packaging.

USA DOT (Ground Transportation) - Bulk

Proper Shipping Name	Combustible liquid, n.o.s. (Solvent Naphtha, Dimethylformamide)
Hazard Class	Comb liq
NA	NA1993
Packing Group	III
NAERG	Guide #128
Packaging Authorization	Non-Bulk: 49 CFR 173.203; Bulk: 173.241
Packaging Exceptions	49 CFR 173.150

IMO/IMDG (Water Transportation)

Proper Shipping Name	Environmentally hazardous substance, liquids, n.o.s. (Aromatic hydrocarbons, Naphthalene)
Hazard Class	9
UN	UN3082

Packing Group III
Marine Pollutant YES
EMS Number F-A, S-F

ICAO/IATA (Air Transportation)

Proper Shipping Name Environmentally hazardous substance, liquids, n.o.s. (Aromatic hydrocarbons, Naphthalene)
Hazard Class 9
UN UN3082
Packing Group III
Quantity Limitations 49 CFR 175.27 and 175.75 - Cargo Aircraft Only: No limit; Passenger Aircraft: No limit

Placard(s)



RID/ADR (Rail Transportation)

Proper Shipping Name Environmentally hazardous substance, liquids, n.o.s. (Aromatic hydrocarbons, Naphthalene)
Hazard Class 9
UN UN3082
Packing Group III

SECTION 15 - REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for substance or mixture

U. S. Federal Regulations

OSHA Hazard Communication Standard: This material is classified as hazardous in accordance with OSHA 29 CFR 1910.1200.

OSHA Process Safety Management Standard: This product is not regulated under OSHA PSM Standard 29 CFR 1910.119.

EPA Risk Management Planning Standard: This product is not regulated under EPA RMP Standard (RMP) 40 CFR Part 68.

EPA Federal Insecticide, Fungicide and Rodenticide Act: This product is not a registered Pesticide under the FIFRA, 40 CFR Part 150.

Toxic Substance Control Act (TSCA) Inventory: All substances in this product are listed on the TSCA Inventory. This product is not subject to TSCA 12(b) Export Notification.

Drug Enforcement Administration (DEA) List 2, Essential Chemicals (21 CFR 1310.02(b)) and 1310.4(f)(2)) and Chemical Code Number
No listings

Drug Enforcement Administration (DEA) Lists 1 & 2, Exempt Chemical Mixtures (21 CFR 1310.12(c)) and Code Number: No listings

Department of Homeland Security (DHS) Chemical Facility Anti-Terrorism Standards (CFATS) Chemicals: No listings

Superfund Amendments and Reauthorization Act (SARA)

SARA Section 311/312 Hazard Categories

Combustible liquid	Harmful if inhaled
May be harmful if swallowed or in contact with skin	May cause respiratory irritation
May be fatal if swallowed and enters airways	Suspected of causing cancer
Causes skin irritation and serious eye irritation	May damage fertility or the unborn child
May cause an allergic skin reaction	

SARA 313 Information: Dimethylformamide and Naphthalene are subject to reporting requirements of Section 313 of the Emergency Planning and Community Right-to Know Act of 1986.

SARA 302/304 Extremely Hazardous Substance: This material does not contain any substances that are subject to the reporting levels established by these sections of Title III of SARA.

SARA 302/304 Emergency Planning & Notification: This material does not contain any substances that are subject to the reporting levels established by these sections of Title III of SARA.

Comprehensive Response Compensation and Liability Act (CERCLA): This product contains the following CERCLA reportable substances:

Dimethylformamide (CAS #68-12-2): RQ = 4.54 kg (100 lb) Naphthalene (CAS #91-20-3): RQ = 4.54 kg (100 lb)

This product has a Reportable Quantity (RQ) of 714.7 lbs. (86.2 gal) based on the RQ of *dimethylformamide* of 100 lb. Releases above the RQ must be reported to the National Response Center. Many states have more stringent release reporting requirements. Report spills required under federal, state and local regulations.

Clean Air Act (CAA)

Dimethylformamide and Naphthalene are Hazardous Air Pollutants (HAPs) designated in CAA Section 112 (b).

This product does not contain Class 1 Ozone depleters.

This product does not contain Class 2 Ozone depleters.

Clean Water Act (CWA)

Dimethylformamide and Naphthalene are Hazardous Substances.

Naphthalene is a Priority Pollutants.

Naphthalene is a Toxic Pollutants.

Solvent Naphtha (Petroleum), Heavy Aromatic are classified as oil under Section 311 of the CWA and the Oil Pollution Act (OPA) of 1990.

U.S. State Regulations

California Prop 65, Safe Drinking Water and Toxic Enforcement Act of 1986

⚠ WARNING: This product will expose you to *Dimethylformamide* and *Naphthalene*, which are known to the state of California to cause cancer.

This product may expose you to *Methanol* (< 1,000 ppm), which is known to the state of California to cause birth defects or reproductive harm.

For more information go to www.P65Warnings.ca.gov.

Other U.S. State Inventories

Dimethylformamide (CAS #68-12-2) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: CA, DE, MA, MN, NJ, NY, PA, RI, WI.

Naphthalene (CAS #91-20-3) is listed on the following State Hazardous Substance Inventories, Right-to-Know lists and/or Air Quality/Air Pollutants lists: CA, DE, ME, MA, MN, NJ, NY, PA, RI, WV, WI.

Canada

WHMIS Hazard Classification: Combustible liquid Suspected of causing cancer

Canadian National Pollutant Release Inventory (NPRI): Dimethylformamide, Naphthalene and Solvent Naphtha (Petroleum) Heavy Aromatic are listed on the NPRI.

European Economic Community

WGK, Germany (Water danger/protection): 2 (hazardous to waters)

Global Chemical Inventory Lists

Country	Inventory Name	Listed
Canada	Domestic Substance List (DSL)	No
Canada	Non-Domestic Substance List (NDSL)	No
Europe	Inventory of New and Existing Chemicals (EINECS)	Yes
United States	Toxic Substance Control Act (TSCA)	Yes
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
New Zealand	New Zealand Inventory of Chemicals (NZIoC)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (KECL)	Yes
Philippines	Philippines Inventory of Chemicals and Chemical Substances (PICCS)	Yes

*Yes - All components of this product comply with the inventory requirements administered by the governing country.

No - One or more components of this product are not on the inventory or are exempt from listing.

15.2 Chemical safety assessment

A chemical safety assessment was not carried out for this product.

SECTION 16 - OTHER INFORMATION

Hazardous Material Information System (HMIS)

HEALTH	*	2
FLAMMABILITY		2
PHYSICAL HAZARD		0
PERSONAL PROTECTION		C

C = safety glasses, gloves
& apron

HMIS Hazard Rating Legend

0 = Minimal 1 = Slight 2 = Moderate

3 = Serious 4 = Severe

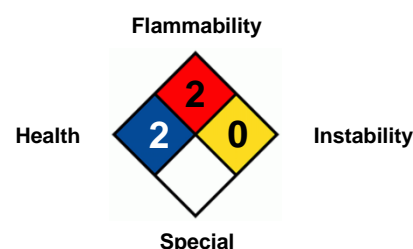
* = Chronic Health Hazard

NFPA Hazard Rating Legend

0 = Insignificant 1 = Slight 2 = Moderate

3 = High 4 = Extreme

National Fire Protection Association (NFPA)



Full Text of GHS Hazard Phrases Referenced in Section 3 (not covered in Section 2)

H226 - Flammable liquid and vapor

H302 - Harmful if swallowed

H410 - Very toxic to aquatic organisms with long lasting effects

H412 - Harmful to aquatic organisms with long lasting effects

Abbreviation Key

ACGIH	American Conference of Governmental Industrial Hygienists	LD₅₀	Lowest Lethal Dose
ADR	Accord Dangereux Routier (European regulations concerning the international transport of dangerous goods by road)	mppcf	Millions of Particles Per Cubic Foot
CAS	Chemical Abstract Services	NA	North America
CFR	Code of Federal Regulations	NAERG	North American Emergency Response Guide Book
COC	Cleveland Open Cup	NIOSH	National Institute for Occupational Safety & Health
DOT	Department of Transportation	NTP	National Toxicology Program
EC₅₀	Half maximal effective concentration	OSHA	Occupational Safety and Health Administration
EMS	Emergency Response Procedures for Ships Carrying	PBT	Persistent, Bioaccumulating and Toxic
EPA	Environmental Protection Agency	PEL	Permissible exposure limit
ErC₅₀	Reduction of Growth Rate	PMCC	Pensky-Martens Closed Cup
ERG	Emergency Response Guide Book	ppm	Parts Per Million
FDA	Food and Drug Administration	RCRA	Resource Conservation and Recovery Act
GHS	Globally Harmonized System of Classification and Labelling of Chemicals (GHS)	RID	Dangerous Goods by Rail
HCS	Hazard Communication Standard	RQ	Reportable Quantity
IARC	International Agency for Research on Cancer	TCC/Tag	Tagliabue Closed Cup
IATA	International Air Transport Association	TLV	Threshold Limit Value
IC₅₀	Half Maximal Inhibitory Concentration	TSCA	Toxic Substance Control Act

ICAO International Civil Aviation Organization
IDLH Immediately Dangerous to Life and Health
IMDG International Maritime Dangerous Goods
IMO International Maritime Organization
LC₅₀ 50% Lethal Concentration
LD₅₀ 50% Lethal Dose

TWA Time-weighted Average
UN United Nations
VOC Volatile Organic Compounds
vPvB Very Persistent and Very Bioaccumulating
WHMIS Workplace Hazardous Materials Information System

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