

SECTION 1: Product and company identification

Product name : d-Solv HD
Use of the substance/mixture : Solvent
Product code : 0491
Company : Athea Laboratories, Inc.
P.O. Box 240014
Milwaukee, WI 53224 - USA
T (414) 354-6417
Emergency number : Chemtrec: (800) 424-9300

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

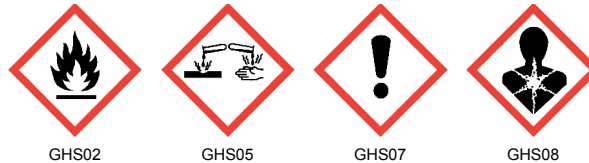
GHS-US classification

Flam. Liq. 3 H226
Skin Irrit. 2 H315
Eye Dam. 1 H318
Skin Sens. 1 H317
Asp. Tox. 1 H304

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US) :



Signal word (GHS-US) :

Danger

Hazard statements (GHS-US) :

Flammable liquid and vapor
May be fatal if swallowed and enters airways
Causes skin irritation
May cause an allergic skin reaction
Causes serious eye damage

Precautionary statements (GHS-US) :

Keep away from heat, hot surfaces, open flames, sparks. - No smoking
Keep container tightly closed
Ground/Bond container and receiving equipment
Use explosion-proof electrical, lighting, ventilating equipment
Use only non-sparking tools
Take precautionary measures against static discharge
Avoid breathing mist, spray, vapors
Wash thoroughly after handling
Contaminated work clothing must not be allowed out of the workplace
Wear eye protection, face protection, protective clothing, protective gloves
If swallowed: Immediately call a doctor, a POISON CENTER
If on skin: Wash with plenty of soap and water
If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a doctor, a POISON CENTER
Specific treatment (see First aid measures on this label)
Do NOT induce vomiting
If skin irritation occurs: Get medical advice/attention
If skin irritation or rash occurs: Get medical advice/attention
Take off contaminated clothing and wash it before reuse
Wash contaminated clothing before reuse
In case of fire: Use alcohol resistant foam, dry extinguishing powder, carbon dioxide (CO2) to extinguish
Store in a well-ventilated place. Keep cool
Store locked up
Dispose of contents/container to comply with local/regional/national/international regulations

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

Full text of H-phrases: see section 16

3.2. Mixtures

Name	Product identifier	%	GHS-US classification
TERPENE HYDROCARBONS	(CAS-No.) 68956-56-9	55-70	Flam. Liq. 3, H226 Skin Irrit. 2, H315 Skin Sens. 1, H317 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics	(CAS-No.) 64742-47-8	15-25	Flam. Liq. 4, H227 Asp. Tox. 1, H304
Alkanes, C14-16	(CAS-No.) 90622-46-1	3-7	Asp. Tox. 1, H304
UNDECETH-5	(CAS-No.) 34398-01-1	1-5	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318
citral	(CAS-No.) 5392-40-5	0.5-1.5	Skin Irrit. 2, H315 Skin Sens. 1, H317
Hydroxy citronellal	(CAS-No.) 107-75-5	0.1-1	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1, H317
Coumarin	(CAS-No.) 91-64-5	0.1-1	Acute Tox. 3 (Oral), H301 Skin Sens. 1, H317 STOT RE 2, H373

A specific chemical identity and/or percentage of composition has been withheld as a trade secret. Any concentration shown as a range is to protect confidentiality or is due to batch variation.

SECTION 4: First aid measures

4.1. Description of first aid measures

- First-aid measures general : If you feel unwell, seek medical advice (show the label where possible).
- First-aid measures after inhalation : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.
- First-aid measures after skin contact : Take off immediately all contaminated clothing and wash it before reuse. Wash skin with plenty of water. If skin irritation or rash occurs: Get medical advice/attention.
- First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical advice/attention.
- First-aid measures after ingestion : Do NOT induce vomiting. Immediately call a poison center or doctor/physician. Rinse mouth with water.

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

- Symptoms/effects : Causes skin irritation. May cause an allergic skin reaction. Causes serious eye damage. May be fatal if swallowed and enters airways.
- Symptoms/effects after inhalation : Irritation of the respiratory tract. Coughing. Headache.
- Symptoms/effects after skin contact : Causes skin irritation. May cause an allergic skin reaction. Repeated exposure may cause skin dryness or cracking.
- Symptoms/effects after eye contact : Causes serious eye damage.
- Symptoms/effects after ingestion : May be fatal if swallowed and enters airways. Risk of aspiration pneumonia. Nausea. Cramps/uncontrolled muscular contractions. Diarrhea.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Foam. Carbon dioxide. Dry chemical powder.
- Unsuitable extinguishing media : Solid water jet ineffective as extinguishing medium.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Flammable liquid and vapor.
- Reactivity : Upon combustion: CO and CO2 are formed.

5.3. Advice for firefighters

- Firefighting instructions : Exercise caution when fighting any chemical fire. In case of fire: Evacuate area. Fight fire remotely due to the risk of explosion. Use water spray or fog for cooling exposed containers. Take account of environmentally hazardous firefighting water.
- Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures : Isolate from fire, if possible, without unnecessary risk. No flames, no sparks. Eliminate all sources of ignition.

6.1.1. For non-emergency personnel

Protective equipment : Protective goggles. Gloves. Protective clothing.
Emergency procedures : Evacuate unnecessary personnel. Avoid contact with skin, eyes and clothing. Ventilate spillage area.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.
Emergency procedures : Stop leak if safe to do so. Stop release. Ventilate area.

6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters.

6.3. Methods and material for containment and cleaning up

For containment : Contain released substance, pump into suitable containers.
Methods for cleaning up : This material and its container must be disposed of in a safe way, and as per local legislation.

6.4. Reference to other sections

No additional information available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Additional hazards when processed : Handle empty containers with care because residual vapors are flammable.
Precautions for safe handling : Comply with the legal requirements. Do not handle until all safety precautions have been read and understood. Use personal protective equipment as required. Do not eat, drink or smoke when using this product. Do not get in eyes, on skin, or on clothing. Handle and open the container with care. Keep away from sources of ignition - No smoking. Ground/bond container and receiving equipment. Use explosion-proof equipment. Use only non-sparking tools. Take precautionary measures against static discharge.
Hygiene measures : Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations. Proper grounding procedures to avoid static electricity should be followed.
Storage conditions : Keep only in the original container in a cool, well ventilated place away from: sparks, open flames, excessive heat. Keep container closed when not in use.
Incompatible products : Oxidizing agent. Strong acids.
Incompatible materials : Sources of ignition.
Storage area : Store away from heat. Store in a cool area. Store in a dry area. Store in a well-ventilated place.
Special rules on packaging : Keep only in original container. meet the legal requirements.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

TERPENE HYDROCARBONS (68956-56-9)
Not applicable
hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-47-8)
Not applicable
Alkanes, C14-16 (90622-46-1)
Not applicable
UNDECETH-5 (34398-01-1)
Not applicable
Hydroxy citronellal (107-75-5)
Not applicable
citral (5392-40-5)
Not applicable
Coumarin (91-64-5)
Not applicable

8.2. Exposure controls

- Appropriate engineering controls : Ensure good ventilation of the work station.
Personal protective equipment : Use appropriate personal protective equipment when risk assessment indicates this is necessary. Gloves. Safety glasses. Protective goggles. Protective clothing.



SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

- Physical state : Liquid
Appearance : Clear, colorless liquid.
Odor : Lime
Odor threshold : No data available
pH : No data available
Melting point : No data available
Freezing point : No data available
Boiling point : No data available
Flash point : 133 °F
Relative evaporation rate (butyl acetate=1) : No data available
Flammability (solid, gas) : No data available
Explosion limits : No data available
Explosive properties : No data available
Oxidizing properties : No data available
Vapor pressure : No data available
Relative density : No data available
Relative vapor density at 20 °C : No data available
Specific gravity / density : 0.85 g/ml
Solubility : Emulsifies in water.
Log Pow : No data available
Log Kow : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity : No data available
Viscosity, kinematic : < 20 cSt
Viscosity, dynamic : No data available
VOC content : < 70 %

SECTION 10: Stability and reactivity

10.1. Reactivity

Upon combustion: CO and CO₂ are formed.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Refer to section 10.1 on Reactivity.

10.4. Conditions to avoid

No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Strong acids. Oxidizing agents.

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

- Acute toxicity : Not classified

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hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-47-8)	
LD50 dermal rabbit	> 5000 mg/kg body weight (Rabbit; Literature)
Alkanes, C14-16 (90622-46-1)	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rabbit	> 2000 mg/kg
LC50 inhalation rat (mg/l)	> 5.8 mg/l/4h
UNDECETH-5 (34398-01-1)	
LD50 oral rat	> 1400 mg/kg

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitization	: May cause an allergic skin reaction.
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

Coumarin (91-64-5)	
IARC group	3 - Not classifiable
Reproductive toxicity	: Not classified
Specific target organ toxicity – single exposure	: Not classified
Specific target organ toxicity – repeated exposure	: Not classified
Aspiration hazard	: May be fatal if swallowed and enters airways.
Symptoms/effects after inhalation	: Irritation of the respiratory tract. Coughing. Headache.
Symptoms/effects after skin contact	: Causes skin irritation. May cause an allergic skin reaction. Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact	: Causes serious eye damage.
Symptoms/effects after ingestion	: May be fatal if swallowed and enters airways. Risk of aspiration pneumonia. Nausea. Cramps/uncontrolled muscular contractions. Diarrhea.
Likely routes of exposure	: Skin and eye contact

SECTION 12: Ecological information

12.1. Toxicity

hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-47-8)	
LC50 fish 1	<= mg/l >0.1 - <=1,NOEC
EC50 Daphnia 1	<= mg/l >1 - <=10,NOEC
LC50 fish 2	> 100 mg/l (LC50)
EC50 Daphnia 2	> 100 mg/l (EC50)
Threshold limit algae 1	> 100 mg/l (EC50)
UNDECETH-5 (34398-01-1)	
LC50 fish 1	< 10 mg/l
EC50 Daphnia 1	< 10 mg/l
ErC50 (algae)	< 10 mg/l

12.2. Persistence and degradability

hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-47-8)	
Persistence and degradability	Readily biodegradable in water. Adsorbs into the soil.

12.3. Bioaccumulative potential

hydrocarbons, C11-C14, n-alkanes, isoalkanes, cyclics, < 2% aromatics (64742-47-8)	
Log Pow	6 - 8.2
Bioaccumulative potential	High potential for bioaccumulation (Log Kow > 5).

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations.
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SECTION 14: Transport information

Department of Transportation (DOT)

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Transport document description : UN1993 Flammable liquids, n.o.s. (Terpene hydrocarbons), 3, III
 UN-No.(DOT) : UN1993
 Proper Shipping Name (DOT) : Flammable liquids, n.o.s.
 Class (DOT) : 3 - Class 3 - Flammable and combustible liquid 49 CFR 173.120
 Hazard labels (DOT) : 3 - Flammable liquid



Packing group (DOT) : III - Minor Danger
 DOT Packaging Non Bulk (49 CFR 173.xxx) : 203
 DOT Packaging Bulk (49 CFR 173.xxx) : 242
 DOT Symbols : G - Identifies PSN requiring a technical name
 DOT Special Provisions (49 CFR 172.102) : B1,B52,IB3,T4,TP1,TP29
 DOT Packaging Exceptions (49 CFR 173.xxx) : 150
 DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27) : 60 L
 DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75) : 220 L
 DOT Vessel Stowage Location : A

Additional information

Emergency Response Guide (ERG) Number : 128
 Other information : This product may be eligible to be shipped as a Limited Quantity or Consumer Commodity ORM-D utilizing the exception found at 49 CFR 173.150.

ADR

No additional information available

Transport by sea

No additional information available

Air transport

No additional information available

SECTION 15: Regulatory information

All components of this product are listed, or excluded from listing, on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory

This product or mixture is not known to contain a toxic chemical or chemicals in excess of the applicable de minimis concentration as specified in 40 CFR §372.38(a) subject to the reporting requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372.

UNDECETH-5 (34398-01-1)	
SARA Section 311/312 Hazard Classes	Immediate (acute) health hazard

California Proposition 65 - This product does not contain any substances known to the state of California to cause cancer, developmental and/or reproductive harm

SECTION 16: Other information

Training advice : Normal use of this product shall imply use in accordance with the instructions on the packaging.

Full text of H-phrases:

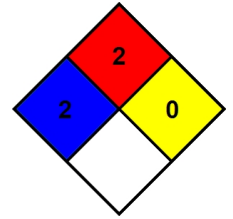
H226	Flammable liquid and vapor
H227	Combustible liquid
H301	Toxic if swallowed
H302	Harmful if swallowed
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H318	Causes serious eye damage
H319	Causes serious eye irritation

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H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

- NFPA health hazard : 2 - Materials that, under emergency conditions, can cause temporary incapacitation or residual injury.
- NFPA fire hazard : 2 - Materials that must be moderately heated or exposed to relatively high ambient temperatures before ignition can occur.
- NFPA reactivity : 0 - Material that in themselves are normally stable, even under fire conditions.



Prepared by: Technical Department

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