

SAFETY DATA SHEET

according to the OSHA Hazard Communication Standard



Dynasolve® 220

Version
1.0

Revision Date:
10/11/2024

SDS Number:
70MDGM661373

Date of first issue:
10/11/2024

SECTION 1. IDENTIFICATION

Product name : Dynasolve® 220

Product number : 661373

Manufacturer or supplier's details

Company : Versum Materials US, LLC 8555 South River Parkway Tempe,
AZ 85284-2601 Exporter EIN No. 47-5632014
www.emdgroup.com/electronics Telephone: 800 837 2724

Emergency telephone : 1-800-424-9300 CHEMTREC (USA) 1-703-741-5970
CHEMTREC (International) 24 Hours/day; 7 Days/week

Recommended use of the chemical and restrictions on use

Recommended use : Organic solvent

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)

Flammable liquids : Category 3

Eye irritation : Category 2A

Aspiration hazard : Category 1

GHS label elements

Hazard pictograms : 

Signal Word : Danger

Hazard Statements : H226 Flammable liquid and vapor.
H304 May be fatal if swallowed and enters airways.
H319 Causes serious eye irritation.

Precautionary Statements : **Prevention:**
P210 Keep away from heat/ sparks/ open flames/ hot surfaces.
No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting/ equip-

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ment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/ eye protection/ face protection.

Response:

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P331 Do NOT induce vomiting.

P337 + P313 If eye irritation persists: Get medical advice/ attention.

Storage:

P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Additional Labeling

The following percentage of the mixture consists of ingredient(s) with unknown acute toxicity: 30 %

Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

Chemical name	CAS-No.	Concentration (% w/w)
Naphtha (petroleum), hydrotreated heavy	64742-48-9	>= 70 - < 90
Benzenesulfonic acid, C10-16-alkyl derivs	68584-22-5	>= 30 - < 50

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

If inhaled : fresh air. Consult doctor if feeling unwell.

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- In case of skin contact : Wash off immediately with plenty of water for at least 15 minutes.
Take off immediately all contaminated clothing. Rinse skin with water/ shower.
- In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Seek medical treatment immediately.
Remove contact lenses.
- If swallowed : caution if victim vomits. Risk of aspiration! Keep airways free.
Call a physician immediately.
Do NOT induce vomiting.
Never give anything by mouth to an unconscious person.
Pulmonary failure possible after aspiration of vomit.
If accidentally swallowed obtain immediate medical attention.
- Most important symptoms and effects, both acute and delayed : irritant effects
- Notes to physician : No information available.

SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Water
Dry powder
Foam
Carbon dioxide (CO₂)
- Unsuitable extinguishing media : For this substance/mixture no limitations of extinguishing agents are given.
- Specific hazards during fire fighting : Combustible.
- Vapors are heavier than air and may spread along floors.
Forms explosive mixtures with air at elevated temperatures.
Development of hazardous combustion gases or vapours possible in the event of fire.
- Fire may cause evolution of:
Carbon oxides

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Sulfur oxides

Further information : Prevent fire extinguishing water from contaminating surface water or the ground water system.
Cool closed containers exposed to fire with water spray.

Special protective equipment for fire-fighters : Stay in danger area only with self-contained breathing apparatus. Prevent skin contact by keeping a safe distance or by wearing suitable protective clothing.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Advice for non-emergency personnel:
Do not breathe vapors, aerosols.
Avoid substance contact.
Ensure adequate ventilation.
Keep away from heat and sources of ignition.
Evacuate the danger area, observe emergency procedures, consult an expert.
Advice for emergency responders:
Protective equipment see section 8.
If possible, stop flow of product.

Environmental precautions : Do not flush into surface water or sanitary sewer system.
Prevent further leakage or spillage if safe to do so.
Risk of explosion.

Methods and materials for containment and cleaning up : Observe possible material restrictions (see sections 7 and 10).
Take up carefully with liquid-absorbent material (e.g. Chemisorb®). Dispose of properly. Clean up affected area.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion : Keep away from open flames, hot surfaces and sources of ignition. Take precautionary measures against static discharge.

Advice on safe handling : Emergency showers and eye wash stations should be readily accessible. Empty containers may contain residue which can be dangerous – do not pressurize, cut, weld, drill, grind and also do not expose such containers to heat, flame, sparks, or other ignition sources. Observe label precautions.

Conditions for safe storage : Store in original container.

Further information on storage conditions : Keep away from heat and sources of ignition. Keep container tightly closed in a dry and well-ventilated place. Keep locked

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up or in an area accessible only to qualified or authorized persons. Risks from decomposition products: see section 10

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Naphtha (petroleum), hydrotreated heavy	64742-48-9	TWA	500 ppm 2,000 mg/m ³	OSHA Z-1
		TWA	400 ppm 1,600 mg/m ³	OSHA P0

Engineering measures : Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

See section 7

Personal protective equipment

Respiratory protection : Respirator with filter for organic vapor
Wear appropriate respirator when ventilation is inadequate. required when vapours/aerosols are generated.

Hand protection

Remarks : Solvent-resistant gloves 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.

Protective measures : Wear suitable protective clothing, gloves and eye/face protection.

Eye protection : Safety glasses

Body Protection : Flame retardant protective clothing
If there is any possibility of direct contact or exposure, wear chemical resistant protective clothing.

Hygiene measures : Avoid contact with skin, eyes and clothing.
Change contaminated clothing. Wash hands after working with substance.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid

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Color : amber

Odor : No data available

Odor Threshold : No data available

pH : acidic

Melting point : No data available

Boiling point/boiling range : 320 °F / 160 °C

Flammability (solid, gas) : Remarks: Combustible.

Decomposition temperature : No data available

Flash point : 44 °C
Method: Seta closed cup

Auto-ignition temperature : No data available

Upper explosion limit / Upper flammability limit : No data available

Lower explosion limit / Lower flammability limit : No data available

Vapor pressure : No data available

Relative vapor density : No data available

Relative density : (water = 1) 0.83

Density : 0.83 g/cm³

Solubility(ies)
Water solubility : insoluble

Partition coefficient: n-octanol/water : No data available

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Evaporation rate : No data available

Viscosity : No data available

Explosive properties : Not classified as explosive.

Oxidizing properties : none

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Vapor/air-mixtures are explosive at intense warming.

Chemical stability : The product is chemically stable under standard ambient conditions (room temperature) .

Possibility of hazardous reactions : no information available

Conditions to avoid : Heating.

Incompatible materials : Bases
Oxidizing agents

Hazardous decomposition products : Carbon monoxide
Carbon dioxide (CO₂)
Sulfur oxides
in the event of fire: See section 5.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Eye contact
Skin contact

Acute toxicity

Product:

Acute inhalation toxicity : Symptoms: Possible symptoms:, mucosal irritations

Components:

Naphtha (petroleum), hydrotreated heavy:

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- Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
Remarks: (External SDS)
- Acute inhalation toxicity : LC50 (Rat): > 6.98 mg/l
Exposure time: 6 h
Test atmosphere: vapour
Remarks: (External SDS)
- Symptoms: Irritation symptoms in the respiratory tract.
- Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
Assessment: The substance or mixture has no acute dermal toxicity
Remarks: (External SDS)

Benzenesulfonic acid, C10-16-alkyl derivs:

- Acute oral toxicity : LD50 (Rat, male and female): > 5,000 mg/kg
Method: OECD Test Guideline 401
GLP: yes
Remarks: (in analogy to similar compounds) (ECHA)
- Acute inhalation toxicity : Assessment: Toxic effects cannot be excluded
- Acute dermal toxicity : LD50 (Rabbit, male and female): > 5,000 mg/kg
Method: OECD Test Guideline 402
GLP: yes
Assessment: The substance or mixture has no acute dermal toxicity
Remarks: (in analogy to similar compounds) (ECHA)

Skin corrosion/irritation

Product:

No data available

Components:

Naphtha (petroleum), hydrotreated heavy:

- Species : Rabbit
Method : OECD Test Guideline 404
Result : slight irritation

Benzenesulfonic acid, C10-16-alkyl derivs:

- Species : Rabbit
Exposure time : 4 h
Method : US-EPA
Result : No skin irritation
GLP : yes
Remarks : (in analogy to similar compounds)

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(ECHA)

Serious eye damage/eye irritation

Product:

No data available

Components:

Naphtha (petroleum), hydrotreated heavy:

Species : Rabbit
Result : No eye irritation
Remarks : (External SDS)

Benzenesulfonic acid, C10-16-alkyl derivs:

Species : Rabbit
Result : irritating
Method : OECD Test Guideline 405
GLP : yes
Remarks : (in analogy to similar compounds)
(ECHA)

Respiratory or skin sensitization

Product:

No data available

Germ cell mutagenicity

Product:

No data available

Carcinogenicity

Product:

No data available

IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Product:

No data available

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STOT-single exposure

Product:

No data available

STOT-repeated exposure

Product:

No data available

Aspiration toxicity

Product:

No data available

Components:

Naphtha (petroleum), hydrotreated heavy:

Aspiration hazard

Further information

Product:

Remarks

: Handle in accordance with good industrial hygiene and safety practice
Other dangerous properties can not be excluded.
The product has not been tested. The information is derived from the properties of the individual components.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

Naphtha (petroleum), hydrotreated heavy:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): > 0.17 mg/l
Exposure time: 96 h
Remarks: No toxicity at the limit of solubility.
(External SDS)

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 0.31 mg/l
aquatic invertebrates : Exposure time: 48 h
Remarks: No toxicity at the limit of solubility.
(External SDS)

Benzenesulfonic acid, C10-16-alkyl derivs:

Toxicity to fish : LL50 (Cyprinodon variegatus (sheepshead minnow)): >
10,000 mg/l
Exposure time: 96 h

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Test Type: static test
Analytical monitoring: yes
Method: OECD Test Guideline 203
GLP: yes
Remarks: (in analogy to similar compounds)
(ECHA)

Toxicity to daphnia and other aquatic invertebrates : EC50 (Daphnia magna (Water flea)): > 1,000 mg/l
Exposure time: 48 h
Test Type: static test
Analytical monitoring: yes
Method: US-EPA
GLP: yes
Remarks: (in analogy to similar compounds)
(ECHA)

Ecotoxicology Assessment

Chronic aquatic toxicity : This product has no known ecotoxicological effects.

Persistence and degradability

Components:

Naphtha (petroleum), hydrotreated heavy:

Biodegradability : Result: Not readily biodegradable.
Biodegradation: 10 %
Exposure time: 28 d
Method: OECD Test Guideline 301D

Bioaccumulative potential

No data available

Mobility in soil

No data available

Other adverse effects

Product:

Ozone-Depletion Potential : Regulation: 40 CFR Protection of Environment; Part 82 Protection of Stratospheric Ozone - CAA Section 602 Class I Substances
Remarks: This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

Additional ecological information : No ecological testing was carried out on the preparation.

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SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste from residues : Waste material must be disposed of in accordance with the national and local regulations. Leave chemicals in original containers. No mixing with other waste. Handle uncleaned containers like the product itself.

Contaminated packaging : When discarding an empty container, the contaminated to the inside is removed completely and it discards according to your local regulations.

SECTION 14. TRANSPORT INFORMATION

International Regulations

IATA-DGR

UN/ID No. : UN 1993
Proper shipping name : Flammable liquid, n.o.s.
(Naphtha (petroleum), hydrotreated heavy)
Class : 3
Packing group : III
Labels : Flammable Liquids
Packing instruction (cargo aircraft) : 366
Packing instruction (passenger aircraft) : 355

IMDG-Code

UN number : UN 1993
Proper shipping name : FLAMMABLE LIQUID, N.O.S.
(Naphtha (petroleum), hydrotreated heavy)
Class : 3
Packing group : III
Labels : 3
EmS Code : F-E, S-E
Marine pollutant : no

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation

49 CFR Road

UN/ID/NA number : UN 1993

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Proper shipping name : Flammable liquids, n.o.s.
(Naphtha (petroleum), hydrotreated heavy)
Class : 3
Packing group : III
Labels : FLAMMABLE LIQUID
ERG Code : 128
Marine pollutant : no

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity

This material does not contain any components with a section 302 EHS TPQ.

SARA 313 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act

This product does not contain any Hazardous Substances listed under the U.S. CleanWater Act, Section 311, Table 116.4A.

This product does not contain any Hazardous Chemicals listed under the U.S. CleanWater Act, Section 311, Table 117.3.

This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

This product does not contain any priority pollutants related to the U.S. Clean Water Act

US State Regulations

Massachusetts Right To Know

No components are subject to the Massachusetts Right to Know Act.

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TSCA list

No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

The ingredients of this product are reported in the following inventories:

TSCA : All substance listed on the TSCA Active Inventory

DSL : All components of this product are on the Canadian DSL

SECTION 16. OTHER INFORMATION

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The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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