

SAFETY DATA SHEET



Chemlease® 41 EZ

Section 1. Identification

Product name : Chemlease® 41 EZ

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

Release Agent

Supplier's details : Chem-Trend LP

1445 W McPherson Park Dr

PO Box 860, Howell MI 48844-0860

517-546-4520

Emergency telephone number and Telephone

number

: +1 517 546 4520

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 2

ACUTE TOXICITY (inhalation) - Category 4

SKIN IRRITATION - Category 2 EYE IRRITATION - Category 2A

SPECIFIC TARGET ORGAN TOXICITY (SINGLE EXPOSURE) (Narcotic effects) -

Category 3

ASPIRATION HAZARD - Category 1

Percentage of the mixture consisting of ingredient(s) of unknown toxicity: 63%

GHS label elements

Hazard pictograms







Signal word

Danger

Hazard statements

: Highly flammable liquid and vapor.

Harmful if inhaled.

Causes serious eye irritation. Causes skin irritation.

May be fatal if swallowed and enters airways.

May cause drowsiness or dizziness.

Precautionary statements

Prevention

: Wear protective gloves. Wear eye or face protection. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Use explosion-proof electrical, ventilating, lighting and all material-handling equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Keep container tightly closed. Use only outdoors or in a well-ventilated area. Avoid breathing vapor. Wash hands thoroughly after handling.

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Section 2. Hazards identification

Response

: IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or physician if you feel unwell. IF SWALLOWED: Immediately call a POISON CENTER or physician. Do NOT induce vomiting. IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower. IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse. If skin irritation occurs: Get medical 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 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.

Hazards not otherwise classified

: None known.

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
Light aliphatic naphtha	≥50 - ≤75	-
nonane	≥10 - ≤25	111-84-2
Hydrocarbon naphthas	≤10	-
Naphtha (petroleum), hydrotreated heavy	≤10	64742-48-9

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 it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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 necessary, call a poison center or physician. 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. Remove victim to fresh air and keep at rest in a position comfortable for breathing. 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

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Section 4. First aid measures

Eye contact : Causes serious eye irritation.

Inhalation : Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause

drowsiness or dizziness.

Skin contact : Causes skin irritation.

ingestion : Can cause central nervous system (CNS) depression. 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 : Adverse symptoms may include the following:

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

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. If it is suspected that fumes are still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. 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

: Highly flammable liquid and vapor. 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. Runoff to sewer may create fire or explosion hazard. Fire water contaminated with this material must be contained and prevented from being discharged to any waterway,

Hazardous thermal decomposition products

: Decomposition products may include the following materials:

carbon dioxide carbon monoxide

sewer or drain.

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Section 5. Fire-fighting measures

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.

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). Water polluting material. May be harmful to the environment if released in large quantities.

Methods and materials for containment and cleaning up

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). Do not swallow. Avoid contact with eyes, skin and clothing. Avoid breathing vapor or mist. Avoid release to the environment. 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.

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Section 7. Handling and storage

including any incompatibilities

Conditions for safe storage, : 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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
nonane	ACGIH TLV (United States, 3/2016).
	TWA: 200 ppm 8 hours.
	TWA: 1050 mg/m ³ 8 hours.
	OSHA PEL 1989 (United States, 3/1989).
	TWA: 200 ppm 8 hours.
	TWA: 1050 mg/m³ 8 hours.
Hydrocarbon naphthas	ACGIH TLV (United States, 3/2016). Absorbed through skin. TWA: 200 mg/m³, (as total hydrocarbon vapor) 8 hours.

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

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.

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 antistatic 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.

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Section 8. Exposure controls/personal protection

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

Physical state	Liquid.	Color	Colorless.
Odor	Solvents	Odor threshold	Not available.
pH	Not available.	Melting point	Not available.
Boiling point	104°C (219.2°F)	Flash point	Closed cup: -7°C (19.4°F) [Pensky-Martens]
Burning time	Not applicable.	Burning rate	Not applicable.
Evaporation rate	Not available.	Flammability (solid, gas)	Not available.
Lower and upper explosive (flammable) limits	Not available.	Vapor pressure	Not available.
Vapor density	>1 [Air = 1]	Relative density	0.72
Solubility	Insoluble in the following materials: cold water.	Solubility in water	Not available.
Partition coefficient: n-octanol/water	Not available.	Auto-ignition temperature	Not available.
Decomposition temperature	Not available.	SADT	Not available.
Viscosity	Kinematic (40°C (104°F)): <0.2 cm²/s (<20 cSt)	Volatility	99.37

Lower and upper explosive (flammable) limits

Distillates (petroleum), hydrotreated light
nonane
Lower: 0.6% Upper: 5.5%
Lower: 0.8% Upper: 2.9%
Naphtha (petroleum), hydrotreated light
Naphtha (petroleum), hydrotreated heavy
Lower: 1.4% Upper: 7.6%

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 : Under normal or 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.

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Section 10. Stability and reactivity

Incompatible materials : Reactive or incompatible with the following materials: oxidizing materials

Hazardous decomposition

products

: Formaldehyde and silicon dioxide may be evolved at elevated temperatures.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Product/ingredient name	Result	Species	Dose	Exposure
nonane	LC50 Inhalation Gas.		3200 ppm	4 hours
Naphtha (petroleum), hydrotreated heavy	LC50 Inhalation Vapor LC50 Inhalation Vapor		17000 mg/m³ 8500 mg/m³	4 hours 4 hours
Trydroticated fiedry	LD50 Oral	Rat	>6 g/kg	-

Irritation/Corrosion: Causes serious eye irritation. Causes skin irritation.Sensitization: No known significant effects or critical hazards.Mutagenicity: No known significant effects or critical hazards.

Carcinogenicity :

Reproductive toxicity: No known significant effects or critical hazards.Teratogenicity: No known significant effects or critical hazards.

Specific target organ toxicity (single exposure)

Name	Target organs
3 - 1	Narcotic effects Narcotic effects

Specific target organ toxicity (repeated exposure)

Not available.

Aspiration hazard

Name	Result
Chemlease® 41 EZ	ASPIRATION HAZARD - Category 1
Light aliphatic naphtha	ASPIRATION HAZARD - Category 1
nonane	ASPIRATION HAZARD - Category 1
Hydrocarbon naphthas	ASPIRATION HAZARD - Category 1
Naphtha (petroleum), hydrotreated heavy	ASPIRATION HAZARD - Category 1

Information on the likely routes of exposure

: Not available.

Potential acute health effects

Eye contact : Causes serious eye irritation.

Inhalation : Harmful if inhaled. Can cause central nervous system (CNS) depression. May cause

drowsiness or dizziness.

Skin contact : Causes skin irritation.

Ingestion : Can cause central nervous system (CNS) depression. May be fatal if swallowed and

enters airways.

Symptoms related to the physical, chemical and toxicological characteristics

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Section 11. Toxicological information

Eye contact

Adverse symptoms may include the following:

pain or irritation watering

redness Inhalation

Adverse symptoms may include the following:

nausea or vomiting

headache

drowsiness/fatigue dizziness/vertigo unconsciousness

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 : Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate

: Not available.

effects

Potential delayed effects : Not available.

Numerical measures of toxicity

Acute toxicity estimates

Route	ATE value
(0)	5609.7 ppm 18.63 mg/l

Section 12. Ecological information

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.

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Section 13. Disposal considerations

RCRA classification : D001 Because of its ignitability if the product is disposed of in its original form.

Section 14. Transport information

	DOT Classification	Bulk	TDG Classification	IATA	IMDG
UN number	UN1866	UN1866 UN1866 UI		UN1866	UN1866
UN proper shipping name	Resin solution	Resin solution (Light aliphatic naphtha,nonane)	RESIN SOLUTION (Light aliphatic naphtha, nonane)	Resin solution (Light aliphatic naphtha, nonane)	RESIN SOLUTION (Light aliphatic naphtha, nonane)
Transport hazard class(es)	3	3	3	3	3
Packing group	II	II	II	II	II
Environmental hazards	No.	Yes	No.	No.	Yes.
Additional information	Limited quantity Yes. Packaging instruction Passenger aircraft Quantity limitation: 5 L Cargo aircraft Quantity limitation: 60 L Special provisions 149, B52, IB2, T4, TP1, TP8		Product classified as per the following sections of the Transportation of Dangerous Goods Regulations: 2. 18-2.19 (Class 3). Explosive Limit and Limited Quantity Index 5 Passenger Carrying Road or Rail Index 5	The environmentally hazardous substance mark may appear if required by other transportation regulations. Passenger and Cargo Aircraft Quantity limitation: 5 L Packaging instructions: 353 Cargo Aircraft Only Quantity limitation: 60 L Packaging instructions: 364 Limited Quantities - Passenger Aircraft Quantity limitation: 1 L Packaging instructions: Y341 Special provisions A3	The marine pollutant mark is not required when transported in sizes of ≤5 L or ≤5 kg. Emergency schedules (EmS) F-E, _S-E_

Emergency Response Guidebook (ERG): 127

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Section 15. Regulatory information

International lists:

Australia inventory (AICS)	All components are listed or exempted.
Canada inventory (DSL/NDSL)	At least one component is not listed in DSL but all such components are listed in NDSL.
China inventory (IECSC)	All components are listed or exempted.
Europe inventory (EINECS)	All components are listed or exempted.
Japan inventory	Japan inventory (ENCS): All components are listed or exempted. Japan inventory (ISHL): Not determined.
Korea inventory (KECI)	All components are listed or exempted.
New Zealand Inventory of Chemicals (NZIoC)	All components are listed or exempted.
Philippines inventory (PICCS)	All components are listed or exempted.
United States inventory (TSCA 8b)	All components are listed or exempted.

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)

Not applicable.

SARA 302/304

Composition/information on ingredients

No products were found.

SARA 304 RQ : Not applicable.

SARA 311/312

Classification : Fire hazard

Immediate (acute) health hazard

Canada

WHMIS (Canada) : Class B-2: Flammable liquid

Class D-2B: Material causing other toxic effects (Toxic).

State regulations

Massachusetts : The following components are listed: NONANE

New York : None of the components are listed.

New Jersey : The following components are listed: NONANE

Pennsylvania : The following components are listed: NONANE

California Prop. 65

WARNING: This product contains less than 0.1% of a chemical known to the State of California to cause cancer. **WARNING**: This product contains less than 1% of a chemical known to the State of California to cause birth defects or other reproductive harm.

Ingredient name	Cancer	Reproductive	No significant risk level	Maximum acceptable dosage level

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Section 15. Regulatory information

toluene	No.	Yes.	No.	7000 μg/day
				(ingestion)
cumene	Yes.	No.	No.	No.
ethylbenzene	Yes.	No.	41 µg/day (ingestion)	No.
			54 µg/day (inhalation)
benzene	Yes.	Yes.	6.4 µg/day (ingestion) 24 μg/day (ingestion)
			13 µg/day (inhalation) 49 μg/day (inhalation)
ethylene oxide	Yes.	Yes.	Yes.	Yes.
1,4-dioxane	Yes.	No.	Yes.	No.
naphthalene	Yes.	No.	Yes.	No.

TSCA 12(b) one-time export: nonane

Section 16. Other information

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

Health: 1 Flammability: 3 Physical hazards: 0 Personal protection Code: H

National Fire Protection Association (U.S.A.)

Health: 1 Flammability: 3 Instability/Reactivity: 0 Special: -

History

Date of issue/Date of : 8/19/2017

revision

Date of previous issue : 6/20/2017

Version : 3

Prepared by : Chem-Trend Regulatory Affairs Department.

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)

UN = United Nations

Indicates information that has changed from previously issued version.

Notice to reader

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