

Duall-88 Leather Adhesive

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations
Issue date: 9/2/2022 Revision date: 11/27/2023 Version: 1.2

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Trade name : Duall-88 Leather Adhesive
Synonyms : Polychloroprene Adhesive Blend/Compound

1.2. Recommended use and restrictions on use

Use of the substance/mixture : Adhesives
Restrictions on use : No additional information available

1.3. Supplier

Supplier

RH Adhesives
308 Old High Street
Acton, MA, 01720
USA
T 1-978-897-8000
sales@rhadhesives.com

1.4. Emergency telephone number

Emergency number : 1-800-535-5053 INFOTRAC; 1-352-323-3500 INFOTRAC International

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS US classification

Flammable liquids Category 2	H225	Highly flammable liquid and vapor
Skin corrosion/irritation Category 2	H315	Causes skin irritation
Serious eye damage/eye irritation Category 2A	H319	Causes serious eye irritation
Skin sensitization, Category 1	H317	May cause an allergic skin reaction
Germ cell mutagenicity Category 2	H341	Suspected of causing genetic defects
Reproductive toxicity Category 2	H361	Suspected of damaging fertility or the unborn child
Specific target organ toxicity – Single exposure, Category 3, Narcosis	H336	May cause drowsiness or dizziness
Specific target organ toxicity (repeated exposure) Category 2	H373	May cause damage to organs through prolonged or repeated exposure
Hazardous to the aquatic environment – Acute Hazard Category 1	H400	Very toxic to aquatic life
Hazardous to the aquatic environment – Chronic Hazard Category 1	H410	Very toxic to aquatic life with long lasting effects

Full text of H statements : see section 16

2.2. GHS Label elements, including precautionary statements

GHS US labeling

Hazard pictograms (GHS US) :



Signal word (GHS US) :

Danger

Hazard statements (GHS US) :

H225 - Highly flammable liquid and vapor
H315 - Causes skin irritation
H317 - May cause an allergic skin reaction

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Precautionary statements (GHS US)	: H319 - Causes serious eye irritation H336 - May cause drowsiness or dizziness H341 - Suspected of causing genetic defects H361 - Suspected of damaging fertility or the unborn child 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 P201 - Obtain special instructions before use. P202 - Do not handle until all safety precautions have been read and understood. P210 - Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. P233 - Keep container tightly closed. P240 - Ground/Bond container and receiving equipment. P241 - Use explosion-proof electrical, lighting, ventilating equipment. P242 - Use only non-sparking tools. P243 - Take precautionary measures against static discharge. P260 - Do not breathe vapors, mist, spray. P264 - Wash hands and forearms, and other exposed area thoroughly after handling. P271 - Use only outdoors or in a well-ventilated area. P272 - Contaminated work clothing must not be allowed out of the workplace. P273 - Avoid release to the environment. P280 - Wear eye protection, protective clothing, protective gloves. P303+P361+P353 - If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. P352 - Wash with plenty of water. P304+P340 - If inhaled: Remove person to fresh air and keep comfortable for breathing. 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 advice/attention. P312 - Call a POISON CENTER if you feel unwell. P321 - Specific treatment (see section 4 on this label). P333+P313 - If skin irritation or rash occurs: Get medical advice/attention. P337+P313 - If eye irritation persists: Get medical advice/attention. P362+P364 - Take off contaminated clothing and wash it before reuse. P370+P378 - In case of fire: Use dry chemical powder, alcohol resistant foam, carbon dioxide (CO2) to extinguish. P391 - Collect spillage. P403+P235 - Store in a well-ventilated place. Keep cool. P405 - Store locked up. P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
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2.3. Other hazards which do not result in classification

No additional information available

2.4. Unknown acute toxicity (GHS US)

No additional information available

SECTION 3: Composition/Information on ingredients

3.1. Substances

Not applicable

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3.2. Mixtures

Comments : The exact percentage (concentration) in the composition has been withheld as a trade secret in accordance with paragraph (i) of § 1910.1200

Name	Product identifier	%	GHS US classification
Toluene	CAS-No.: 108-88-3	≥ 25 – < 40	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 2, H401 Aquatic Chronic 3, H412
Heptane	CAS-No.: 142-82-5	≥ 25 – < 40	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Eye Irrit. 2B, H320 STOT SE 3, H336 Asp. Tox. 1, H304 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Component A	CAS-No.: trade secret	≥ 10 – < 15	Muta. 2, H341
Ethyl acetate	CAS-No.: 141-78-6	≥ 5 – < 10	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336
Acetone	CAS-No.: 67-64-1	≥ 2.5 – < 5	Flam. Liq. 2, H225 Eye Irrit. 2A, H319 STOT SE 3, H336
Component C	CAS-No.: trade secret	≥ 1 – < 2.5	Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Skin Sens. 1B, H317 STOT SE 3, H335

Full text of hazard classes and H-statements : see section 16

SECTION 4: First-aid measures

4.1. Description of first aid measures

First-aid measures general	: Call a poison center/doctor/physician if you feel unwell. Never give anything by mouth to an unconscious person.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. Get medical advice/attention if you feel unwell.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. 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. If eye irritation persists: Get medical advice/attention.
First-aid measures after ingestion	: Rinse mouth out with water. Do NOT induce vomiting. Get medical advice/attention if you feel unwell.

4.2. Most important symptoms and effects (acute and delayed)

Symptoms/effects after inhalation	: Depression of the central nervous system, headaches, dizziness, drowsiness, loss of coordination. nausea, vomiting.
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Symptoms/effects after skin contact	: Causes skin irritation. Redness. Itching. Swelling. May cause an allergic skin reaction. Skin rash/inflammation. Absorbed through the skin. Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact	: Causes serious eye irritation. Redness. Lacrimation. Itching. Blurred vision.
Symptoms/effects after ingestion	: May cause gastrointestinal irritation, nausea, vomiting and diarrhea. Abdominal pain.
Chronic symptoms	: Suspected of damaging fertility. Suspected of damaging the unborn child. Suspected of causing genetic defects. May cause damage to organs through prolonged or repeated exposure. May cause kidney and liver disease, and disorders of the central nervous system.

4.3. Immediate medical attention and special treatment, if necessary

Treat symptomatically.

SECTION 5: Fire-fighting measures

5.1. Suitable (and unsuitable) extinguishing media

Suitable extinguishing media	: Dry powder. Alcohol-resistant foam. Carbon dioxide.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Specific hazards arising from the chemical

Fire hazard	: Highly flammable liquid and vapor. Vapors are heavier than air and may travel considerable distance to an ignition source and flash back to source of vapors. Heating will cause a rise in pressure with a risk of bursting. Burning produces stinking and toxic fumes. In case of fire and/or explosion do not breathe fumes.
Hazardous decomposition products in case of fire	: Toxic fumes may be released. Carbon dioxide. Carbon monoxide.

5.3. Special protective equipment and precautions for fire-fighters

Firefighting instructions	: Evacuate the danger area. Move containers from fire area if it can be done without personal risk. Fight fire with normal precautions from a reasonable distance. Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers. Prevent fire-fighting water from entering environment. Eliminate all ignition sources if safe to do so.
Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Wear fire/flame resistant/retardant clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

General measures	: Avoid contact with skin and eyes. No flames, no sparks. Eliminate all sources of ignition. Use special care to avoid static electric charges.
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6.1.1. For non-emergency personnel

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Evacuate unnecessary personnel. Ventilate spillage area. Avoid breathing vapors, mist. Do not get in eyes, on skin, or on clothing. Do not touch or walk on the spilled product. No action shall be taken without appropriate training or involving any personal risk.

6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Evacuate unnecessary personnel. Avoid breathing (dust, vapor, mist, gas). Use non-sparking tools.

6.2. Environmental precautions

Avoid release to the environment. Prevent from entering sewers, basements and workpits, or any place where its accumulation can be dangerous. Notify authorities if product enters sewers or public waters.

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6.3. Methods and material for containment and cleaning up

- For containment : Stop leak, if possible without risk. Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams. Remove ignition sources.
- Methods for cleaning up : Caution : this product can cause the floor to be slippery. Move containers from spill area. Prevent entry to sewers and public waters. Do not absorb with saw-dust or any other combustible absorbent material. Small quantities of liquid spill: take up in non-combustible absorbent material and shovel into container for disposal. For large spills, confine the spill in a dike and charge it with wet sand or earth for subsequent safe disposal. Clean contaminated surfaces with an excess of water. Use non-sparking tools.
- Other information : Dispose of via an authorised person/ licensed waste disposal contractor or by other suitable waste treatment techniques.

6.4. Reference to other sections

For further information refer to section 13. For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Provide adequate ventilation to minimize dust and/or vapor concentrations. Avoid breathing vapors, mist. Wear personal protective equipment. Avoid contact with skin and eyes. Eliminate all ignition sources if safe to do so. Handling this product may result in electrostatic accumulation. Use proper grounding procedures. Take precautionary measures against static discharge. Use explosion-proof equipment. Use only non-sparking tools. Empty containers retain product residue and can be hazardous.
- Hygiene measures : Do not eat, drink or smoke when using this product. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Always wash hands after handling the product. Wash contaminated clothing before reuse.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Store in a well-ventilated place. Store in a dry place. Keep cool. Keep away from food, drink and animal feedingstuffs. Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Containers which are opened should be properly resealed and kept upright to prevent leakage. Store in accordance with local, regional, national or international regulation.
- Incompatible products : Strong acids. Strong bases. Oxidizing agent.
- Incompatible materials : Direct sunlight. Heat sources. Sources of ignition.
- Storage area : Store in dry, cool, well-ventilated area.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Acetone (67-64-1)

USA - ACGIH - Occupational Exposure Limits

Local name	Acetone
ACGIH OEL TWA	250 ppm
ACGIH OEL STEL	500 ppm
Remark (ACGIH)	TLV® Basis: URT & eye irr; CNS impair. Notations: A4 (Not classifiable as a Human Carcinogen); BEI
Regulatory reference	ACGIH 2021

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Acetone (67-64-1)	
USA - ACGIH - Biological Exposure Indices	
Local name	ACETONE
BEI (BLV)	25 mg/l Parameter: Acetone - Medium: urine - Sampling time: End of shift - Notations: Ns
Regulatory reference	ACGIH 2023
USA - OSHA - Occupational Exposure Limits	
Local name	Acetone
OSHA PEL TWA	2400 mg/m ³ 1000 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
Toluene (108-88-3)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Toluene
ACGIH OEL TWA	20 ppm
Remark (ACGIH)	TLV® Basis: CNS, visual & hearing impair; female repro system eff; pregnancy loss. Notations: OTO; A4 (Not classifiable as a Human Carcinogen); BEI
Regulatory reference	ACGIH 2023
USA - ACGIH - Biological Exposure Indices	
Local name	TOLUENE
BEI (BLV)	0.3 mg/g Kreatinin Parameter: o-Cresol (with hydrolysis) - Medium: urine - Sampling time: End of shift - Notations: B 0.03 mg/l Parameter: Toluene - Medium: urine - Sampling time: End of shift 0.02 mg/l Parameter: Toluene - Medium: blood - Sampling time: Prior to last shift of workweek
Regulatory reference	ACGIH 2023
USA - OSHA - Occupational Exposure Limits	
Local name	Toluene
OSHA PEL TWA	200 ppm
OSHA PEL (Ceiling)	300 ppm
Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr shift	500 ppm 10 mins.
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-2
Heptane (142-82-5)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Heptane, isomers (n-Heptane)
ACGIH OEL TWA	400 ppm
ACGIH OEL STEL	500 ppm
Remark (ACGIH)	TLV® Basis: CNS impair; URT irr
Regulatory reference	ACGIH 2021

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Heptane (142-82-5)	
USA - OSHA - Occupational Exposure Limits	
Local name	Heptane (n-Heptane)
OSHA PEL TWA	2000 mg/m ³
	500 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1
Ethyl acetate (141-78-6)	
USA - ACGIH - Occupational Exposure Limits	
Local name	Ethyl acetate
ACGIH OEL TWA	400 ppm
Remark (ACGIH)	TLV® Basis: URT & eye irr
Regulatory reference	ACGIH 2021
USA - OSHA - Occupational Exposure Limits	
Local name	Ethyl acetate
OSHA PEL TWA	1400 mg/m ³
	400 ppm
Regulatory reference (US-OSHA)	OSHA Annotated Table Z-1

8.2. Appropriate engineering controls

- Appropriate engineering controls : Provide local exhaust or general room ventilation. Handle in accordance with good industrial hygiene and safety procedures. Avoid all unnecessary exposure. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.
- Environmental exposure controls : Avoid release to the environment. Technical onsite conditions and measures to reduce or limit discharges, air emissions and releases to soil.

8.3. Individual protection measures/Personal protective equipment

Personal protective equipment:

Wear recommended personal protective equipment. Personal protective equipment should be chosen according to the NIOSH standards and in discussion with the supplier of the protective equipment.

Hand protection:

Chemical resistant gloves (according to NIOSH standard). Please follow the instructions related to the permeability and the penetration time provided by the manufacturer. Selection of protective gloves should be made based on the type of task performed.

Eye protection:

Chemical goggles or safety glasses

Skin and body protection:

Wear suitable protective clothing. Skin protection appropriate to the conditions of use should be provided

Respiratory protection:

Where excessive vapor, mist, or dust may result, use approved respiratory protection equipment. All respirators must conform to specifications for efficiency and performance indicated by OSHA Standard 29 CFR 1910.134 and NIOSH Standards

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SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid
Color	: amber
Odor	: Characteristic solvent-like
Odor threshold	: No data available
pH	: No data available
Melting point	: No data available
Freezing point	: Not applicable
Boiling point	: > 35 °C (95.0 °F)
Flash point	: -7.78 °C (18 °F, ASTM D-56 9/21/2008)
Relative evaporation rate (butyl acetate=1)	: No data available
Flammability (solid, gas)	: Not applicable.
Vapor pressure	: No data available
Relative vapor density at 20°C	: > 1 (heavier than air)
Relative density	: 0.82 (water=1)
Density	: 822.8 g/l
Solubility	: insoluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available
Viscosity, kinematic	: 1349 – 1523 mm ² /s
Viscosity, dynamic	: No data available
Explosion limits	: Lower explosion limit: 1 vol % Upper explosion limit: 12 vol %
Explosive properties	: No data available
Oxidizing properties	: No data available

9.2. Other information

VOC content	: 78 % (639 g/l)
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SECTION 10: Stability and reactivity

10.1. Reactivity

Highly flammable liquid and vapor. Can form explosive mixtures with air. Heating may cause a fire or explosion.

10.2. Chemical stability

Stable under normal conditions of use.

10.3. Possibility of hazardous reactions

Hazardous polymerization: Will not occur. Reacts vigorously with strong oxidizers and acids.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7). Protect from sunlight. Overheating. Extremely high or low temperatures. No flames, no sparks. Eliminate all sources of ignition.

10.5. Incompatible materials

Oxidizing agent. Strong acids. Strong bases.

10.6. Hazardous decomposition products

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

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SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Acetone (67-64-1)	
LD50 oral rat	5800 mg/kg
LD50 dermal rabbit	15688 mg/kg
LC50 Inhalation - Rat	44 g/m ³
ATE US (oral)	5800 mg/kg body weight
ATE US (dermal)	15688 mg/kg body weight
ATE US (vapors)	44 mg/l/4h
ATE US (dust, mist)	44 mg/l/4h

Component A (trade secret)	
LD50 oral rat	> 40000 mg/kg

Toluene (108-88-3)	
LD50 oral rat	5580 mg/kg
LD50 dermal rabbit	8390 mg/kg
LC50 Inhalation - Rat	25.7 mg/l/4h
ATE US (oral)	2600 mg/kg body weight
ATE US (dermal)	12000 mg/kg body weight
ATE US (vapors)	25.7 mg/l/4h
ATE US (dust, mist)	25.7 mg/l/4h

Heptane (142-82-5)	
LD50 oral rat	> 5000 mg/kg
LD50 dermal rabbit	3000 mg/kg
LC50 Inhalation - Rat	103 g/m ³ (4 h)

Ethyl acetate (141-78-6)	
LD50 oral rat	5620 mg/kg
LD50 dermal rabbit	> 20 ml/kg
ATE US (oral)	5620 mg/kg body weight

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

Toluene (108-88-3)	
IARC group	3 - Not classifiable

Reproductive toxicity : Suspected of damaging fertility or the unborn child.

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STOT-single exposure : May cause drowsiness or dizziness.

Heptane (142-82-5)	
STOT-single exposure	May cause drowsiness or dizziness.
STOT-repeated exposure	May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	Not classified
Viscosity, kinematic	1349 – 1523 mm ² /s
Symptoms/effects after inhalation	Depression of the central nervous system, headaches, dizziness, drowsiness, loss of coordination. nausea, vomiting.
Symptoms/effects after skin contact	Causes skin irritation. Redness. Itching. Swelling. May cause an allergic skin reaction. Skin rash/inflammation. Absorbed through the skin. Repeated exposure may cause skin dryness or cracking.
Symptoms/effects after eye contact	Causes serious eye irritation. Redness. Lacrimation. Itching. Blurred vision.
Symptoms/effects after ingestion	May cause gastrointestinal irritation, nausea, vomiting and diarrhea. Abdominal pain.
Chronic symptoms	Suspected of damaging fertility. Suspected of damaging the unborn child. Suspected of causing genetic defects. May cause damage to organs through prolonged or repeated exposure. May cause kidney and liver disease, and disorders of the central nervous system.
Other information	No experimental study on the product is available. The information given is based on our knowledge of the components and the classification of the product is determined by calculation.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Very toxic to aquatic life with long lasting effects.

Acetone (67-64-1)	
LC50 - Fish [1]	4144.846 mg/l (96 h, Oncorhynchus mykiss)
EC50 - Crustacea [1]	1679.66 mg/l (48 h, Daphnia magna, static)
LC50 - Fish [2]	6210 – 8120 mg/l (96 h, Pimephales promelas, static)
EC50 - Crustacea [2]	12600 – 12700 mg/l (48 h, Daphnia magna)
Toluene (108-88-3)	
LC50 - Fish [1]	15.22 – 19.05 mg/l (96 h, Pimephales promelas, flow-through)
EC50 - Crustacea [1]	5.46 – 9.83 mg/l (48 h, Daphnia magna, static)
LC50 - Fish [2]	12.6 mg/l (96 h, Pimephales promelas, static)
EC50 - Crustacea [2]	11.5 mg/l (48 h, Daphnia magna)
NOEC chronic crustacea	0.74 mg/l (Ceriodaphnia dubia)
Heptane (142-82-5)	
LC50 - Fish [1]	375 mg/l (96 h; Cichlid fish)
Ethyl acetate (141-78-6)	
LC50 - Fish [1]	220 – 250 mg/l (96 h, Pimephales promelas, flow-through)
EC50 - Crustacea [1]	560 mg/l (48 h, Daphnia magna, static)
LC50 - Fish [2]	484 mg/l (96 h, Oncorhynchus mykiss, flow-through)
NOEC (chronic)	(21 days, Daphnia magna)

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12.2. Persistence and degradability

Duall-88 Leather Adhesive	
Persistence and degradability	Biodegradability in water: no data available.
Acetone (67-64-1)	
Persistence and degradability	Readily biodegradable.
Component A (trade secret)	
Persistence and degradability	Rapidly degradable
Toluene (108-88-3)	
Persistence and degradability	Rapidly degradable
Heptane (142-82-5)	
Persistence and degradability	Rapidly degradable
Component C (trade secret)	
Persistence and degradability	Rapidly degradable
Ethyl acetate (141-78-6)	
Persistence and degradability	Rapidly degradable

12.3. Bioaccumulative potential

Duall-88 Leather Adhesive	
Bioaccumulative potential	No data available concerning bioaccumulation.
Acetone (67-64-1)	
BCF - Fish [1]	0.69
Partition coefficient n-octanol/water (Log Pow)	-0.24
Toluene (108-88-3)	
Partition coefficient n-octanol/water (Log Pow)	2.65
Heptane (142-82-5)	
Partition coefficient n-octanol/water (Log Pow)	4.66
Ethyl acetate (141-78-6)	
BCF - Fish [1]	30
Partition coefficient n-octanol/water (Log Pow)	0.6

12.4. Mobility in soil

Duall-88 Leather Adhesive	
Ecology - soil	Adsorbs into the soil.

12.5. Other adverse effects

Other adverse effects : No other effects known.

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SECTION 13: Disposal considerations

13.1. Disposal methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Dispose in a safe manner in accordance with local/national regulations. Do not pierce or burn, even after use.
Additional information	: Flammable vapors may accumulate in the container.
Ecological information	: Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT / TDG / IMDG / IATA

14.1. UN number

DOT NA No	: UN1133
UN-No. (TDG)	: UN1133
UN-No. (IMDG)	: 1133
UN-No. (IATA)	: 1133

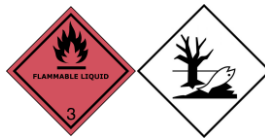
14.2. UN proper shipping name

Proper Shipping Name (DOT)	: Adhesives
Proper Shipping Name (TDG)	: ADHESIVES
Proper Shipping Name (IMDG)	: ADHESIVES (Methyl ethyl ketone; Acetone)
Proper Shipping Name (IATA)	: Adhesives (Methyl ethyl ketone; Acetone)

14.3. Transport hazard class(es)

DOT

Transport hazard class(es) (DOT)	: 3
Hazard labels (DOT)	: 3



TDG

Transport hazard class(es) (TDG)	: 3
Hazard labels (TDG)	: 3



IMDG

Transport hazard class(es) (IMDG)	: 3
Hazard labels (IMDG)	: 3



IATA

Transport hazard class(es) (IATA)	: 3
Hazard labels (IATA)	: 3

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14.4. Packing group

Packing group (DOT)	: II
Packing group (TDG)	: II
Packing group (IMDG)	: II
Packing group (IATA)	: II

14.5. Environmental hazards

Dangerous for the environment	: Yes
Marine pollutant	: Yes



Other information : No supplementary information available.

14.6. Special precautions for user

DOT

UN-No. (DOT)	: UN1133
DOT Special Provisions (49 CFR 172.102)	: 149 - When transported as a limited quantity or a consumer commodity, the maximum net capacity specified in 173.150(b)(2) of this subchapter for inner packaging may be increased to 5 L (1.3 gallons). B52 - Notwithstanding the provisions of 173.24b of this subchapter, non-reclosing pressure relief devices are authorized on DOT 57 portable tanks. IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized. T4 - 2.65 178.274(d)(2) Normal..... 178.275(d)(3) TP1 - The maximum degree of filling must not exceed the degree of filling determined by the following: Degree of filling = $97 / 1 + a (tr - tf)$ Where: tr is the maximum mean bulk temperature during transport, and tf is the temperature in degrees celsius of the liquid during filling. TP8 - A portable tank having a minimum test pressure of 1.5 bar (150 kPa) may be used when the flash point of the hazardous material transported is greater than 0 C (32 F).
DOT Packaging Exceptions (49 CFR 173.xxx)	: 150
DOT Packaging Non Bulk (49 CFR 173.xxx)	: 173
DOT Packaging Bulk (49 CFR 173.xxx)	: 242
DOT Quantity Limitations Passenger aircraft/rail (49 CFR 173.27)	: 5 L
DOT Quantity Limitations Cargo aircraft only (49 CFR 175.75)	: 60 L
DOT Vessel Stowage Location	: B - (i) The material may be stowed "on deck" or "under deck" on a cargo vessel and on a passenger vessel carrying a number of passengers limited to not more than the larger of 25 passengers, or one passenger per each 3 m of overall vessel length; and (ii) "On deck only" on passenger vessels in which the number of passengers specified in paragraph (k)(2)(i) of this section is exceeded.

TDG

UN-No. (TDG)	: UN1133
Explosive Limit and Limited Quantity Index	: 5 L
Excepted quantities (TDG)	: E2
Passenger Carrying Road Vehicle or Passenger Carrying Railway Vehicle Index	: 5 L

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Emergency Response Guide (ERG) Number : 128

IMDG
Limited quantities (IMDG) : 5 L
Excepted quantities (IMDG) : E2
Packing instructions (IMDG) : P001
Packing provisions (IMDG) : PP1
IBC packing instructions (IMDG) : IBC02
Tank instructions (IMDG) : T4
Tank special provisions (IMDG) : TP1, TP8
EmS-No. (Fire) : F-E - FIRE SCHEDULE Echo - NON-WATER-REACTIVE FLAMMABLE LIQUIDS
EmS-No. (Spillage) : S-D - SPILLAGE SCHEDULE Delta - FLAMMABLE LIQUIDS
Stowage category (IMDG) : B
Properties and observations (IMDG) : Adhesives are solutions of gums, resins, etc., usually volatile due to the solvents. Miscibility with water depends upon their composition.

IATA
PCA Excepted quantities (IATA) : E2
PCA Limited quantities (IATA) : Y341
PCA limited quantity max net quantity (IATA) : 1L
PCA packing instructions (IATA) : 353
PCA max net quantity (IATA) : 5L
CAO packing instructions (IATA) : 364
CAO max net quantity (IATA) : 60L
Special provision (IATA) : A3
ERG code (IATA) : 3L

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

Not applicable

SECTION 15: Regulatory information

15.1. US Federal regulations

All components of this product are present and listed as Active on the United States Environmental Protection Agency Toxic Substances Control Act (TSCA) inventory, except for:

Component A	CAS-No. trade secret	≥ 10 – < 15%
Component C	CAS-No. trade secret	≥ 1 – < 2.5%

Chemical(s) subject to the reporting requirements of Section 313 or Title III of the Superfund Amendments and Reauthorization Act (SARA) of 1986 and 40 CFR Part 372.

Toluene	CAS-No. 108-88-3	≥ 25 – < 40%
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Acetone (67-64-1)

CERCLA RQ	5000 lb
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Toluene (108-88-3)

Listed on EPA Hazardous Air Pollutant (HAPS)	
CERCLA RQ	1000 lb

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Ethyl acetate (141-78-6)

CERCLA RQ

5000 lb

15.2. International regulations

CANADA

Acetone (67-64-1)

Listed on the Canadian DSL (Domestic Substances List)

Toluene (108-88-3)

Listed on the Canadian DSL (Domestic Substances List)

Heptane (142-82-5)

Listed on the Canadian DSL (Domestic Substances List)

Ethyl acetate (141-78-6)

Listed on the Canadian DSL (Domestic Substances List)

EU-Regulations

No additional information available

National regulations

Acetone (67-64-1)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Toluene (108-88-3)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Heptane (142-82-5)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

Ethyl acetate (141-78-6)

Listed on INSQ (Mexican National Inventory of Chemical Substances)

15.3. US State regulations

WARNING:

This product can expose you to Toluene, which is known to the State of California to cause birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

SECTION 16: Other information

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date : 11/27/2023
Data sources : Supplier's safety documents.
Training advice : Training staff on good practice.
Other information : SDS prepared by. H2 Compliance.

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Full text of H-phrases	
H225	Highly flammable liquid and vapor
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H317	May cause an allergic skin reaction
H319	Causes serious eye irritation
H320	Causes eye irritation
H335	May cause respiratory irritation
H336	May cause drowsiness or dizziness
H341	Suspected of causing genetic defects
H361	Suspected of damaging fertility or the unborn child
H373	May cause damage to organs through prolonged or repeated exposure
H400	Very toxic to aquatic life
H401	Toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects

Indication of changes:

9.1. Information on basic physical and chemical properties.

Safety Data Sheet (SDS), USA

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.