
SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION:

Product name: NUFLEX® 458 SUBFLOOR ADHESIVE
Recommended use: Construction Adhesive
Restrictions on use: No further information available
Manufacturer: NUCO INC.
150 Curtis Drive
Guelph, Ontario N1K 1N5
Tel: (519)-823-4994
Fax: (519)-823-1099

Emergency telephone: Infotrac 24 Hour Emergency Tel: (800)-535-5053

SECTION 2 – HAZARDS IDENTIFICATION:

GHS Classification: Flammable liquids – Category 1
Skin irritation – Category 2
Eye irritation – Category 2B
Acute toxicity (Inhalation) – Category 4
Acute toxicity (Oral) – Category 4
Reproductive toxicity – Category 1A
Specific Target Organ Toxicity-Single Exposure (Inhalation) – Category 3

GHS Label elements:

Hazard symbols:



Signal word: Danger

Hazard statements: H224 Extremely flammable liquid and vapor
H315 Causes skin irritation
H320 Causes eye irritation
H332 Harmful if inhaled
H302 Harmful if swallowed
H335 May cause respiratory irritation
H360 May damage fertility or the unborn child

Precautionary statements:

Prevention: P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P210 Keep away from heat/sparks/open flames/hot surface. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ventilating/lighting equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P261 Avoid breathing dust/fume/gas/mist/vapors/spray.
P264 Wash hands and other skin areas thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P271 Use only outdoors or in a well-ventilated area.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Response : P303+P361+P353 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
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.
 P301+P312+P330 If swallowed: Call a poison center/doctor if you feel unwell. Rinse mouth.
 P337+P313 If eye irritation persists: Get medical advice/attention.
 P332+P313 If skin irritation occurs: Get medical advice/attention.
 P321 Specific treatment: Seek immediate medical advice. Refer to product label and Section 4 of this SDS.
 P308+P313 If exposed or concerned: Get medical advice/attention.
 P362 Take off contaminated clothing and wash it before reuse.
 P370+P378 In case of fire: Use dry chemical/water fog/foam to extinguish.

Storage: P403+P233+P235 Store in a well-ventilated place. Keep container tightly closed. Keep cool.
 P405 Store locked up.

Disposal: P501 Dispose of contents and container in accordance with applicable local, regional, national and international regulations.

Other hazards: Reproductive hazard – contains material which can cause adverse reproductive effects in females.

Supplemental information: No further information available.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS:

Substance/Mixture : Mixture

Chemical Name	CAS No.	Concentration (%)
n-Hexane	110-54-3	10.0 – 25.0
Toluene	108-88-3	10.0 – 25.0
Distillates (petroleum), hydrotreated heavy naphthenic	64742-52-5	1.0 – 5.0

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

SECTION 4 - FIRST AID MEASURES:

Eye contact: Check for and remove any contact lenses. Immediately flush eyes with copious quantities of lukewarm water for at least 15 minutes. Do not attempt to physically remove the solids or gums from the eye. Seek medical attention immediately if irritation persists.

Skin contact: Remove contaminated clothing. Wash thoroughly with warm water and non-abrasive soap. Seek medical attention if you feel ill or a reaction develops.

Inhalation: Remove to fresh air. If breathing is irregular or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. Get medical attention immediately.

Ingestion: Wash out mouth with water. Do not induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. Get medical attention immediately.

Most important symptoms/effects, acute and delayed: High vapor concentrations can cause headaches, dizziness, drowsiness, nausea and may lead to unconsciousness. Adverse symptoms may include respiratory tract irritation, coughing, skin dryness, skin cracking, reduced fetal weight, increase in fetal deaths and skeletal malformations.

Indication of immediate medical attention and special treatment needed: Provide general supportive measures and treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.

SECTION 5 - FIRE FIGHTING MEASURES:

Flammable Conditions: VAPORS CAN IGNITE EXPLOSIVELY AND CAN CAUSE FLASH FIRE. Never use around sparks, flames or other sources of ignition.

Suitable extinguishing media: Carbon dioxide, dry chemical, water fog or foam. Water can be used to cool fire exposed containers to prevent pressure build-up and possible explosion.

Unsuitable extinguishing media: Do not use water jet.

Specific hazards arising from the chemical: Hazardous decomposition products such as carbon oxides and traces of incompletely burned carbon products may present.

Special protective equipment and precautions for fire fighters: Self-contained breathing apparatus and protective clothing should be worn in fighting large fires involving chemicals. Determine the need to evacuate or isolate the area according to your local emergency plan.

SECTION 6 – ACCIDENTAL RELEASE MEASURES:

Personal precautions, protective equipment and emergency procedures: Follow safe handling advice and personal protective equipment recommendation in Section 8.

Environment precautions: Discharged into the environment must be avoided. Retain and dispose of contaminated wash water. Local authorities should be advised if significant spillages cannot be contained.

Methods and materials for containment and cleaning up: Restrict access to the area of the spill. Provide ventilation and protective clothing. Scrape up adhesive (use spark-proof tools and explosion-proof equipment) and place in container for disposal. Clean area as appropriate since the adhesive may represent a slip hazard. Cleaning may require detergents. Dispose of saturated absorbant or cleaning materials appropriately, since spontaneous heating may occur. Local, state, provincial, federal laws and regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup.

SECTION 7 – HANDLING AND STORAGE:

Precautions for safe handling: Handle in accordance with good industrial hygiene and safety practice. Take care to prevent spills, waste and minimize release to the environment. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed.

Conditions for safe storage, including any incompatibilities: Store under dry conditions, below 110°F (43°C) and keep container tightly sealed when not in use. Use only in well ventilated area. Containers may retain product residues and vapors. Store large quantities in buildings designed and protected for storage of NFPA Class 1-B flammable materials. Eliminate all ignition sources. Separate from oxidizing materials.

SECTION 8 – EXPOSURE CONTROL / PERSONAL PROTECTION:

Control Parameters:

Ingredient name	Exposure limits
n-Hexane	OSHA PEL: TWA: 500 ppm, 8 hrs. TWA: 1800 mg/m ³ , 8 hrs. NIOSH REL: TWA: 50 ppm, 10 hrs. TWA: 180 mg/m ³ , 10 hrs. ACGIH TLV: Absorbed through skin. TWA: 50 ppm, 8 hrs.
Toluene	OSHA PEL: TWA: 100 ppm, 8 hrs. TWA: 375 mg/m ³ , 8 hrs. STEL: 150 ppm, 15 minutes STEL: 560 mg/m ³ , 15 minutes

	OSHA PEL Z2: TWA: 200 ppm, 8 hrs. CEIL: 300 ppm AMP: 500 ppm, 10 minutes NIOSH REL: TWA: 100 ppm, 10 hrs. TWA: 375 mg/m ³ , 10 hrs. STEL: 150 ppm, 15 minutes STEL: 560 mg/m ³ , 15 minutes ACGIH TLV: TWA: 20 ppm, 8 hrs.
Distillates (petroleum), hydrotreated heavy naphthenic	ACGIH TLV: TWA: 5 mg/m ³ , 8 hrs., Inhalable fraction NIOSH REL: TWA: 5 mg/m ³ , 10 hrs., Mist STEL: 10 mg/m ³ , 15 minutes, Mist OSHA PEL: TWA: 5 mg/m ³ 8 hrs.

Engineering controls: Ensure adequate ventilation, especially in confined areas. Minimize workplace exposure concentrations. Wear an organic vapor NIOSH / MSHA approved respirator unless local exhaust ventilation is provided or exposures are within guidelines. In indoor applications, passive ventilation (opening of doors and windows) is recommended. Local exhaust as necessary to keep exposure levels within guidelines.

Personal protective equipment: Safety glasses with side-protection, impermeable gloves (e.g., neoprene, nitrile, silver shield (R)), coveralls or apron are important in preventing contamination of eyes, skin and clothing. Wash thoroughly after handling. Ensure that eyewash stations and safety showers are close to the workstation location.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES:

Appearance:	Paste, beige color
Odor:	Mild solvent odor
Odor threshold:	Not available
pH (ASTM D1293):	Not available
Melting point/Freezing point:	Not available
Initial boiling point and boiling range:	156°F (69°C)
Flash point:	Closed cup: Less than 0°F(-18°C) - Setflash
Evaporation rate:	Not available
Flammability (solid, gas):	Not determined
Upper explosion limit:	Not available
Lower explosion limit:	Not available
Vapor pressure:	Not available
Vapor density:	Not available
Specific gravity:	1.14 – 1.18
Solubility:	Insoluble in cold and hot water
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	Not applicable
Volatility:	31% - 34.5% (w/w)
Volatile Organic Content:	389 g/L (less water, less exempt solvents)

SECTION 10 – STABILITY AND REACTIVITY:

Reactivity:	No hazardous reactions if stored and handled as indicated.
Chemical stability:	Stable under normal conditions.
Possibility of hazardous reactions:	Will not occur under normal conditions of storage and use.

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.

Incompatible materials: Highly reactive or incompatible with oxidizing materials.

Hazardous decomposition products: No hazardous decomposition products produced under normal conditions of storage and use.

SECTION 11 - TOXICOLOGICAL INFORMATION:

Information on the likely routes of exposure:

Inhalation: Toxic by inhalation. Irritating to respiratory system.
Ingestion: Harmful if swallowed.
Skin contact: Causes skin irritation.
Eye contact: Severely irritating to eyes. Risk of serious damage to eyes.

Symptoms related to the physical, chemical and toxicological characteristics:

Prolonged or repeated contact can defat the skin and lead to irritation, cracking and/or dermatitis. High vapor concentrations can cause headaches, dizziness, drowsiness, nausea and may lead to unconsciousness. Adverse symptoms may include respiratory tract irritation, coughing, skin dryness, reduced fetal weight, increase in fetal deaths, skeletal malformations.

Acute toxicity:

Ingredient name	Result	Species	Dose	Exposure
n-Hexane	LC50 Inhalation Gas LD50 Oral	Rat Rat	48,000 ppm 15,840 mg/kg	4 hours ----
Toluene	LC50 Inhalation Vapor LD50 Oral	Rat Rat	49 mg/m ³ 636 mg/kg	4 hours ----
Distillates (petroleum), hydrotreated heavy naphthenic	LD50 Oral	Rat	>5,000 mg/kg	----

Chronic toxicity: No known significant effects or critical hazards.

Skin and eye corrosion/irritation:

Ingredient name	Result	Species	Exposure
n-Hexane	Eyes- Mild irritant	Rabbit	10 milligrams
Toluene	Eyes- Mild irritant Eyes- Mild irritant Eyes- Severe irritant Skin- Mild irritant Skin- Mild irritant Skin- Moderate irritant Skin- Moderate irritant	Rabbit Rabbit Rabbit Pig Rabbit Rabbit Rabbit	0.5 minutes, 100 milligrams 870 micrograms 24 hours, 2 milligrams 24 hours, 250 microliters 435 milligrams 24 hours, 20 milligrams 500 milligrams
Distillates (petroleum), hydrotreated heavy naphthenic	Skin- Severe irritant	Rabbit	500 milligrams

Serious eye damage/irritation: Severe irritating to eyes.
Aspiration hazard: No data available

Specific target organ toxicity - single exposure: No data available

Specific target organ toxicity – repeated exposure: No data available

Respiratory or skin sensitization: High vapor concentrations can cause headaches, dizziness, drowsiness and nausea and may lead to unconsciousness.

Carcinogenicity:

Ingredient name	ACGIH	IARC	EPA	NIOSH	OSHA	NTP
Toluene	A4	3	----	----	----	----
Distillates (petroleum), hydrotreated heavy naphthenic	A4	----	----	----	----	----

Reproductive toxicity: Reproductive toxicant – female: Toluene (CAS# 108-88-3)

Teratogenicity: No known significant effects or critical hazards.

Germ-cell mutagenicity: No known significant effects or critical hazards.

SECTION 12 – ECOLOGICAL INFORMATION:

Ecotoxicity: No known significant effects or critical hazards.

Aquatic ecotoxicity:

Ingredient name	Result	Species	Exposure
n-Hexane	Acute LC50 2500-2980 ug/L fresh water	Fish-Pimephales promelas-31 days-20.4 mm-0.123 g	96 hours
Toluene	Acute EC50 433 ppm Marine water	Algae-Skeletonema costatum	96 hours
	Acute EC50 12,500 ug/L Fresh water	Algae-Pseudokirchneriella subcapitata	72 hours
	Acute EC50 11,600 ug/L Fresh water	Crustaceans-Gammarus pseudolimnaeus-Adult-9 mm-0.017g	48 hours
	Acute EC50 6,000 ug/L Fresh water	Daphnia-Daphnia magna-Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute LC50 5,500 ug/L Fresh water Chronic NOEC 1,000 ug/L Fresh water	Fish-Oncorhynchus kisutch-Fry 1 g Daphnia-Daphnia magna- <=24 hrs.	96 hours 21 days

Persistence and degradability: No known significant effects or critical hazards.

Bioaccumulative potential: No known significant effects or critical hazards.

Mobility in soil: No data available.

Other adverse effects: No data available.

SECTION 13 – DISPOSAL CONSIDERATIONS:

Waste disposal: Dispose of in accordance with Federal, State / Provincial and local regulations. Do not discharge into drains/surface waters/ground water. Care should be taken when handling emptied containers that have not been cleaned or rinsed out. Vapor from product residues may create a highly flammable or explosive atmosphere inside the container.

SECTION 14 - TRANSPORT INFORMATION:**Shipping information:**

Regulatory information	UN number	Proper shipping name	Classes	Packing group	Additional information
DOT Classification	1133	ADHESIVES, containing flammable liquid RQ (toluene, n-hexane)	3	III	<u>Reportable quantity:</u> 6332.2 lbs/2874.8 kg [654.7 gal./2478.3 L] Package sizes shipped in quantities less than the product reportable quantity are not subject to the RQ transportation requirements. <u>Remarks:</u> Limited quantity
TDG Classification	1133	ADHESIVES, containing flammable liquid	3	III	<u>Remarks:</u> Limited quantity
ADR/RID Class	1133	ADHESIVES, containing flammable liquid	3	III	<u>Special provisions:</u> 640 (E) <u>Tunnel code:</u> (D/E) <u>Remarks:</u> Limited quantity
IMDG Class	1133	ADHESIVES, containing flammable liquid	3	III	<u>Remarks:</u> Limited quantity
IATA-DGR Class	1133	ADHESIVES, containing flammable liquid	3	III	-----

SECTION 15 - REGULATORY INFORMATION:

Hazard Communication Standard (HCS) Classification: Flammable liquid
Toxic material
Irritating material

U.S. Federal Regulations:

SARA 302/304: No products were found.

SARA 311/312 Hazards Identification: Fire Hazard, Immediate (acute) Health Hazard, Delayed (chronic) Health Hazard.

SARA 313:

	Chemical Name	CAS Number	Concentration %
Form R – Reporting requirements	n-Hexane	110-54-3	10 - 25
	Toluene	108-88-3	10 - 25
Supplier notification	n-Hexane	110-54-3	10 - 25
	Toluene	108-88-3	10 - 25

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs):	Listed
Clean Air Act Section 602 Class I Substances:	Not listed
Clean Air Act Section 602 Class II Substances:	Not listed
DEA List I Chemicals (Precursor Chemicals):	Not listed
DEA List II Chemicals (Essential Chemicals):	Listed

U.S. State Regulations:

Massachusetts: The following components are listed: n-Hexane, Toluene.
New York: The following components are listed: n-Hexane, Toluene.
New Jersey: The following components are listed: n-Hexane, Toluene, Mineral Oil (untreated and midly treated).
Pennsylvania: The following components are listed: n-Hexane, Toluene.

California Proposition 65: This product contains a chemical known to the State of California to cause birth defects or other reproductive harm: Toluene (CAS# 108-88-3)- maximum acceptable dosage level: 7,000 micrograms/day (ingestion).

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

TSCA: All components of this product are listed or exempted from listing on the TSCA inventory of Chemical Substances.

DSL: All chemical substances in this product comply with the CEPA 1999 and NSNR and are on or exempted from listing on the Canadian Domestic Substances List (DSL).

NFPA Profile: Health 2, Flammability 3, Reactivity 0

SECTION 16 - OTHER INFORMATION:

Prepared by: Technical Services Department
Revision date: May 19, 2015

The information herein is given in good faith, but no warranty, express or implied, is made. Product users should make independent judgements of the suitability of this information to ensure proper use and to protect the health and safety of employees.

Form: SDS NUFLEX 458 SUBFLOOR ADHESIVE Rev.: 8 Date: 05/15