
SAFETY DATA SHEET

SECTION 1 – IDENTIFICATION:

Product name: NUFLEX® 650 FLEXONE HIGH PERFORMANCE POLYURETHANE SEALANT

Recommended use: Joint Sealant

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: Acute toxicity (Inhalation) – Category 4
Eye irritation – Category 2A
Respiratory sensitization – Category 1
Skin sensitization – Category 1
Carcinogenicity – Category 2
Reproductive toxicity – Category 2 (unborn child)
Specific Target Organ Toxicity-Repeated Exposure – Category 1

GHS Label elements:

Hazard symbols:



Signal word: Danger

Hazard statements: Harmful if inhaled
May cause an allergic skin reaction
Causes serious eye irritation
May cause allergy or asthma symptoms or breathing difficulties if inhaled
Suspected of causing cancer
Suspected of damaging the unborn child
Causes damage to organs (central nervous system) through prolonged or repeated exposure

Precautionary statements:

Prevention: Obtain special instructions before use
Do not handle until all safety precautions have been read and understood.
Do not breath dust/gas/mist/vapors.
Do not eat, drink or smoke when using this product
Use only outdoors or in a well-ventilated area
Wash hands and other skin areas thoroughly after handling
Contaminated work clothing should not be allowed out of the workplace
Wear protective gloves/protective clothing/eye protection/face protection.
In case of inadequate ventilation] wear respiratory protection

Response : If exposed or concerned: Call a POISON CENTER or doctor/physician.
If in eyes, rinse with water for several minutes. Remove contact lenses if present and easy to do. Continue rinsing.
If inhaled: If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician.

If inhaled: Remove person to fresh air and keep comfortable for breathing
If on skin: wash with plenty of soap and water.
If skin irritation or rash: Call a POISON CENTER or doctor/physician
Take off contaminated clothing and wash it before reuse.
If eye irritation persists: Call a POISON CENTER or doctor/physician.

Storage: Store locked up.

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

Other hazards: Sensitization can occur in some individuals, leading to asthma-like spasms of the bronchial tubes and difficult breathing. Individuals with a history of respiratory illness, asthmatic conditions, eye damage or TDI sensitization should not be exposed to this product. TDI is included in the NTP annual report on carcinogens. Results from a TDI health study indicate that overexposure to a respiratory irritant, resulting in lower respiratory tract symptoms could increase the risks of developing asthma-like reactions from subsequent TDI exposure. Animal tests indicate that skin contact may play a role in causing respiratory sensitization.

Supplemental information: 98-99% of the mixture consists of component(s) of unknown acute dermal toxicity.
97-99% of the mixture consists of component(s) of unknown acute oral toxicity.
97-100% of the mixture consists of component(s) of unknown acute inhalation (dust) toxicity.

SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS:

Substance/Mixture : Mixture

Chemical Name	CAS No.	Concentration (%)
Limestone	1317-65-3	7.0 – 20.0
Titanium Dioxide	13463-67-7	3.0 – 10.0
Talc	14807-96-6	3.0 – 5.0
Stoddard Solvent	8052-41-3	1.0 – 3.0
Toluene-2,6-Diisocyanate	91-08-7	0.3 – 0.4
Trimethoxy(3-(oxiranylmethoxy)propyl)silane	2530-83-8	0.3 – 1.0
4-Toluenesulphonyl isocyanate	4083-64-1	0.2 – 0.3
2-Ethylhexanoic acid	149-57-5	0.0 – 0.2
Toluene-2,4-Diisocyanate	584-84-9	0.03 – 0.04

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: Flush 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. Under no circumstances should organic solvent be used. Seek medical attention if you feel ill or a reaction develops.

Inhalation: Remove to fresh air and provide water. Seek medical attention if you feel ill or a reaction develops.

Ingestion: Do not induce vomiting. Never give anything by mouth to an unconscious person. Get medical attention.

Most important symptoms/effects, acute and delayed: No further information available.

Indication of immediate medical attention and special treatment needed:

Provide general supportive measures and treat symptomatically.
No known specific antidote.

SECTION 5 - FIRE FIGHTING MEASURES:

Suitable extinguishing media: Carbon dioxide, dry chemical, water fog or foam.

Unsuitable extinguishing media: Water jet. Water stream directed into fire may cause frothing with subsequent spread of fire.

Specific hazards arising from the chemical: Carbon dioxide, carbon monoxide, nitrogen oxides, fumes/smoke, carbon black harmful vapors.

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 recommendations 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, NIOSH / MSHA approved respirator and protective clothing. Scrape up sealant and place in container for disposal. Cleaning may require steam or detergents. Dispose of saturated absorbant or cleaning materials appropriately. 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.

Conditions for safe storage, including any incompatibilities: Store in an adequately ventilated area under dry conditions between 50°F (10°C) to 77°F (25°C) and keep container tightly sealed when not in use. Use only in well ventilated areas.

SECTION 8 – EXPOSURE CONTROL / PERSONAL PROTECTION:

Control Parameters:

Ingredient	CAS No.	Value Type (form of exposure)	Control parameters/ Permissible concentration	Basis
Toluene-2,6-Diisocyanate	91-08-7	TWA	0.005 ppm	ACGIH TLV
		STEL	0.02 ppm	ACGIH TLV
2-Ethylhexanoic acid	149-57-5	TWA (inhalation fraction and vapor)	5 mg/m ³	ACGIH TLV
Limestone	1317-65-3	PEL (respirable fraction)	5 mg/m ³	OSHA PEL
		PEL (total dust)	15 mg/m ³	OSHA PEL

		TWA (total dust)	15 mg/m ³	OSHA PEL
		TWA (respirable fraction)	5 mg/m ³	OSHA PEL
Titanium dioxide	13463-67-7	PEL (total dust)	15 mg/m ³	OSHA PEL
		TWA (total dust)	10 mg/m ³	OSHA PEL
		TWA	10 mg/m ³	ACGIH TLV
Talc	14807-96-6	TWA (respirable)	20 millions of particles per cubic foot of air	OSHA PEL
		TWA (respirable)	0.1 mg/m ³	OSHA PEL
		TWA (total dust)	0.3 mg/m ³	OSHA PEL
		TWA (respirable fraction)	2 mg/m ³	ACGIH TLV
Stoddard solvent	8052-41-3	PEL	500 ppm, 2,900 mg/m ³	OSHA PEL
		TWA	100 ppm	ACGIH TLV

Engineering controls:

Ensure adequate ventilation, especially in confined areas. Minimize workplace exposure concentrations. Wear a NIOSH / MSHA approved respirator when exposure limits are exceeded.

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.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES:

Appearance:	Paste, pigmented
Odor:	Slight odor
Odor threshold:	Not available
pH (ASTM D1293):	Not available
Melting point/Freezing point:	Not available
Initial boiling point and boiling range:	Not available
Flash point:	Non-flammable
Evaporation rate:	Not available
Flammability (solid, gas):	Not flammable
Upper explosion limit:	Not applicable
Lower explosion limit:	Not applicable
Vapor pressure:	No data available
Vapor density:	Not available
Specific gravity:	Approx. 1.20 g/cm ³ @ 20°C
Solubility:	Insoluble in water
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	No data available
Viscosity:	Not applicable
Volatile Organic Content:	35 grams per liter (0.29 lbs./gal), less water and 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 when handled properly.
Conditions to avoid:	Moisture and incompatible materials.
Incompatible materials:	Strong oxidizing agents, strong bases, strong acids.
Hazardous decomposition products:	No hazardous decomposition products if stored and handled as indicated.

SECTION 11 - TOXICOLOGICAL INFORMATION:

Information on the likely routes of exposure:

Inhalation:	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Ingestion:	May be harmful if swallowed.
Skin contact:	May cause an allergic skin reaction.
Eye contact:	May cause serious eye irritation.

Symptoms related to the physical, chemical and toxicological characteristics: No information available.

Acute toxicity: Oral: ATE >5,000 mg/kg
 Inhalation: ATE 20.41 mg/L , determined for vapor
 Dermal: ATE >5,000 mg/kg

Skin corrosion/irritation: Sensitization after skin contact possible.

Serious eye damage/irritation: May cause eye irritation.

Aspiration hazard: No data available

Specific target organ toxicity – single exposure: No data available

Specific target organ toxicity – repeated exposure: No data available
 May cause chronic effects if prolonged exposure.

Respiratory or skin sensitization: Prolonged and repeated skin contact may cause dermatitis or aggravate pre-existing skin disorders. Inhalation of high vapor concentration or ingestion may cause headache, vomiting, dizziness and nausea.

Carcinogenicity: Titanium dioxide: IARC Group 2B – possibly carcinogenic to humans.
 In long term studies in rats in which the substance was given by inhalation, a carcinogenic effect was observed. In long term studies in rats and mice in which the substance was given by feed , a carcinogenic effect was not observed.
 Dermal exposure is not expected to be carcinogenic.
Toluene-2,6-diisocyanate: IARC Group 2B – possibly carcinogenic to humans.

Reproductive toxicity: Contains a suspected reproductive toxin.

Teratogenicity: No indications of a developmental toxic/teratogenic effect were seen in animal studies.

Germ-cell mutagenicity: The substance was mutagenic in various bacterial test systems. However, these results could not be confirmed in mammalian cell culture.

SECTION 12 – ECOLOGICAL INFORMATION:

Ecotoxicity: Acutely harmful for aquatic organisms. May cause long term adverse effects in the aquatic environment.

Persistence and degradability: Poorly biodegradable. The product is unstable in water.

Bioaccumulative potential: None known.

Mobility in soil: Adsorption to solid soil phase is not expected.

Other adverse effects: Do not allow material to run into surface waters, wastewater or soil.
An environmental hazard can not be excluded in the event of unprofessional handling or disposal.

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.

SECTION 14 - TRANSPORT INFORMATION:

Shipping information: Not subject to DOT, TDG, IMDG or IATA/ICAO Regulations.

SECTION 15 - REGULATORY INFORMATION:

U.S. Federal Regulations:

SARA 302/304 Extremely Hazardous Substances:

No components of this product are subject to the reporting requirements of these sections of Title III of SARA.

SARA 302/304 Emergency Planning & Notification:

No components of this product are subject to the reporting requirements of these sections of Title III of SARA.

SARA 311/312 Hazards: Acute Health Hazard, Chronic Health Hazard

SARA 313: Toluene-2,6-diisocyanate (CAS# 91-08-7) is subject to the reporting levels established by Section 313 of the Emergency Planning and Community Right-to-Know Act of 1986.

Comprehensive Response Compensation and Liability Act (CERCLA):

This product contains the following CERCLA reportable substance:

Phosphoric acid (CAS# 7664-38-2):	RQ- 2,268 kg (5,000 lbs).
Toluene (CAS# 108-88-3):	RQ- 453.6 kg (1,000 lbs).
Chlorobenzene (CAS# 108-90-7):	RQ- 45.36 kg (100 lbs).
Toluene-2,4-diisocyanate (CAS# 584-84-9):	RQ- 45.36 kg (100 lbs).
Toluene-2,6-diisocyanate (CAS# 91-08-7):	RQ- 45.36 kg (100 lbs).

U.S. State Regulations:

California Proposition 65: This product contains a chemical(s) known to the State of California to cause cancer and birth defects or other reproductive harm.

State Substance List:

This product contains a listed substance(s) that appears on one or more of the Substance Lists for Pennsylvania, Massachusetts and New Jersey:

- Limestone (CAS# 1317-65-3)
- Titanium dioxide (CAS# 13463-67-7)
- Talc (CAS#14807-96-6)
- Bis(2-propylheptyl)phthalate (CAS# 53306-54-0)
- Stoddard solvent (CAS# 8052-41-3)
- Calcium oxide (CAS# 1305-78-8)
- Toluene-2,4-diisocyanate (CAS# 584-84-9)
- Toluene-2,6-diisocyanate (CAS# 91-08-7)

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. This product is not subject to TSCA 12(b) Export Notification.

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 1, Reactivity 0

SECTION 16 - OTHER INFORMATION:

Prepared by: Technical Services Department
Revision date: February 4, 2016

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: SDSNUFLEX 650 FLEXONE Rev.: 1 Date: 02/16