USA SAFETY DATA SHEET

Revised 3/15/24

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product name: **ISO 770A**
Product Use/Class: **Elastomeric Coating, Part A**

Forsch Polymer Corp.
3025 S. Wyandot St.
Englewood, Co. 80110

Telephone: 303-322-9611
Non-Transportation Emergency: 303-548-7716

EFFECTIVE DATE: 04/30/2024

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATION:

Flammable liquids Category 2
Acute toxicity Inhalation - Dust and Mist Category 4 - 64.0% of the mixture consists of ingredient(s) of unknown toxicity.
Acute toxicity Inhalation - Vapours Category 4 - 64.0% of the mixture consists of ingredient(s) of unknown toxicity.
Skin corrosion/irritation Category 2
Serious eye damage/eye irritation Category 2A
Skin sensitization Category 1
Respiratory sensitization Category 1
Carcinogenicity Category 2
Reproductive toxicity Category 2
Specific target organ systemic toxicity (single exposure) Category 3
Specific target organ systemic toxicity (single exposure) Category 1 Central nervous system
Specific target organ systemic toxicity (repeated exposure) Category 1 Central nervous system, Kidney, Lungs
Hazardous to the aquatic environment - acute hazard Category 2
Hazardous to the aquatic environment - chronic hazard Category 2

GHS LABEL ELEMENTS:

Symbol(s)

Signal Word

DANGER

Hazard Statements

Highly flammable liquid and vapor.
Harmful if inhaled.
Causes skin irritation.
Causes serious eye irritation.
May cause an allergic skin reaction.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Suspected of causing cancer.
Suspected of damaging fertility or the unborn child.
May cause harm to breast-fed children.
May cause drowsiness or dizziness.
May cause respiratory irritation.
Causes damage to organs.(Central nervous system)

Causes damage to organs through prolonged or repeated exposure.(Central nervous system, Kidney, Lungs)
Toxic to aquatic life.
Toxic to aquatic life with long lasting effects.

Precautionary Statements

Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking.
Ground/Bond container and receiving equipment.
Use explosion-proof electrical/ventilating/lighting equipment.
Use only non-sparking tools.
Take precautionary measures against static discharge.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Wear protective gloves/protective clothing/eye protection/face protection.
Use personal protective equipment as required.
In case of inadequate ventilation wear respiratory protection.
Do not breathe dust/fume/gas/mist/vapors/spray.
Wash thoroughly after handling.
Do not eat, drink or smoke when using this product.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing should not be allowed out of the workplace.
Avoid release to the environment.

Response

In case of fire: refer to section 5 of SDS for extinguishing media.
Call a POISON CENTER or doctor/physician if you feel unwell.
IF exposed: Call a POISON CENTER or doctor/physician.
Specific treatment (see supplemental first aid instructions on this label).
IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.
IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.
If skin irritation or rash occurs: Get medical advice/attention.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
Collect spillage.

Storage

Store in a well-ventilated place. Keep cool.
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.

Disposal:

Dispose of contents/container in accordance with waste/disposal laws and regulations of your country or particular locality.

Other Hazards:

This product contains component(s) which have the following warnings; however based on the GHS classification criteria of your country or locale, the product mixture may be outside the respective category(s).

Acute: Vapor harmful; may affect the brain or nervous system causing dizziness, headache or nausea. Possible irritation of the respiratory system can occur causing a variety of symptoms such as dryness of the throat, tightness of the chest, and shortness of breath. May cause central nervous system depression characterized by the following progressive steps: headache, dizziness, staggering gait, confusion, unconsciousness or coma. May cause lung damage. Harmful if swallowed. Ingestion is not an expected route of entry in industrial or commercial uses.
Chronic: Prolonged or repeated contact may result in dermatitis. May cause liver damage. IARC and NTP have determined that there is sufficient evidence for carcinogenicity of toluene diisocyanate to experimental animals and inadequate evidence in humans. IARC has designated titanium dioxide (TiO_2) as Group 2B — possibly carcinogenic to humans in dust form. However, a number of long term animal studies and human epidemiology studies evaluating TiO_2 and workplace exposure show insufficient evidence for carcinogenic affects. EPA, NTP and OSHA do not designate TiO_2 as a carcinogen and ACGIH designates TiO_2 as A4 - not classifiable as a human carcinogen. TiO_2 is not present in this product as a dust and no airborne exposure is expected during application.

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS Number	Range
N-Butyl Acetate	123-86-4	20 - 40 %
High Molecular Polymers	NA	60-70%
Titanium dioxide	13463-67-7	1 - 5 %
Toluene diisocyanate	26471-62-5	0.1 - 1 %

Any "PROPRIETARY" component(s) in the above table is considered trade secret, thus the specific chemical and its exact concentration is being withheld.

4. FIRST AID MEASURES

FIRST AID - EYE CONTACT: Flush eyes immediately with large amount of water for at least 15 minutes holding eyelids open while flushing. Get prompt medical attention.

FIRST AID - SKIN CONTACT: Flush contaminated skin with large amounts of water while removing contaminated clothing. Wash affected skin areas with soap and water. Get medical attention if symptoms occur.

FIRST AID - INHALATION: Move person to fresh air. Restore and support continued breathing. If breathing is difficult, give oxygen. Get immediate medical attention.

FIRST AID - INGESTION: If swallowed, do not induce vomiting. Call a physician or poison control center immediately for further instructions. Never give anything by mouth if victim is rapidly losing consciousness, unconscious or convulsing.

5. FIRE-FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA:

SPECIFIC HAZARDS POSSIBLY ARISING FROM THE CHEMICAL: Flammable liquid and vapor. Keep containers tightly closed. Isolate from heat, electrical equipment, sparks, open flame, and other sources of ignition. Closed containers may rupture when exposed to extreme heat. Use water spray to keep fire exposed containers cool. During a fire, irritating and/or toxic gases and particulate may be generated by thermal decomposition or combustion.

SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTIONS FOR FIRE-FIGHTERS: Wear full firefighting protective clothing, including self-contained breathing apparatus (SCBA). Water spray may be ineffective. If water is used, fog nozzles are preferable.

6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES: Remove all sources of ignition (flame, hot surfaces, and electrical, static or frictional sparks). Avoid contact. Avoid breathing vapors. Use self-contained breathing equipment.

ENVIRONMENTAL PRECAUTIONS: Do not contaminate bodies of water, waterways, or ditches, with chemical or used container.

METHODS AND MATERIALS FOR CONTAINMENT AND CLEANUP: Keep non-essential personnel a safe distance away from the spill area. Notify appropriate authorities if necessary. Avoid contact. Before attempting cleanup, refer to hazard caution information in other sections of the SDS form. Contain and remove with inert absorbent material.

7. HANDLING AND STORAGE

HANDLING: Keep closure tight and container upright to prevent leakage.Ground and bond containers when transferring material.Avoid skin and eye contact.Wash thoroughly after handling.Avoid breathing of vapor or spray mists.Do not handle until all safety precautions have been read and understood.Empty containers should not be re-used.Use with adequate ventilation.Because empty containers may retain product residue and flammable vapors, keep away from heat, sparks and flame; do not cut, puncture or weld on or near the empty container.Do not smoke where this product is used or stored.

STORAGE: Do not store or use near heat, sparks, or open flame.Refer to OSHA 29CFR Part 1910.106 "Flammable and Combustible Liquids" for specific storage requirements. Store only in well-ventilated areas.Do not puncture, drag, or slide container.Keep container closed when not in use.

INCOMPATIBILITY: Amines, acids, water, hydroxyl, or active hydrogen compounds.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

COMPONENT EXPOSURE LIMIT

Chemical Name	ACGIH TLV-TWA	ACGIH TLV-STEL	OSHA PEL-TWA	OSHA PEL-CEILING	Skin
High Molecular Polymers	N.A.	N.A.	N.A.	N.A.	N.A.
N-Butyl Acetate	150 ppm	N.E.	150ppm	N.E.	N.A.
Titanium dioxide	10 mg/m3	N.E.	15 mg/m3	N.E.	N.A.
Toluene diisocyanate	0.005 ppm	0.02 ppm0.02 ppm	0.04 mg/m3 0.005 ppm	N.E.	N.A.

N.A. - Not Applicable, N.E. - Not Established, S - Skin Designation

Engineering controls: Sufficient ventilation in pattern and volume should be provided in order to maintain air contaminant levels below recommended exposure limits. Caution: Solvent vapors are heavier than air and collect in lower levels of the work area. Sufficient ventilation (using explosion-proof equipment) should be provided to prevent flammable vapor/air mixtures from accumulating.

PERSONAL PROTECTION MEASURES/EQUIPMENT:

RESPIRATORY PROTECTION: Use a NIOSH approved chemical/mechanical filter respirator designed to remove a combination of particulates and organic vapor if occupational limits are exceeded. For emergency situations, confined space use, or other conditions where exposure limits may be greatly exceeded, use an approved air-supplied respirator. Observe OSHA regulations (29CFR 1910.134) for respirator use. This product contains isocyanates which have poor odor warning properties. If occupational exposure limits are exceeded, a NIOSH approved supplied-air respirator is required.

SKIN PROTECTION: Use neoprene, nitrile, or rubber gloves to prevent skin contact.

EYE PROTECTION: Use safety eyewear including safety glasses with side shields and chemical goggles where splashing may occur.

OTHER PROTECTIVE EQUIPMENT: Use disposable or impervious clothing if work clothing contamination is likely. Remove and wash contaminated clothing before reuse.

HYGIENIC PRACTICES: Wash hands before eating, smoking, or using toilet facility. Do not smoke in any chemical handling or storage area. Food or beverages should not be consumed anywhere this product is handled or stored. Wash thoroughly after handling.

9. PHYSICAL AND CHEMICAL PROPERTIES

Typical values, not to be used for specification purposes.

ODOR:	Solvent	**VAPOR PRESSURE: VAPOR**	N.D.
APPEARANCE:	Gray	**DENSITY: LOWER**	Heavier than Air
PHYSICAL STATE:	Liquid	**EXPLOSIVE LIMIT: UPPER**	**1.1** %(V)
FLASH POINT:	98 °F, 36 °C Setaflash Closed Cup	**EXPLOSIVE LIMIT:**	7.9 %(V)
BOILING RANGE:	**110** - 152 ˚C	**EVAPORATION RATE:**	Slower than n-butyl-acetate
AUTOIGNITION TEMPERATURE:	N.D.	**DENSITY:**	1.08 g/cm3 - 9.02 lb/gal
DECOMPOSITION TEMPERATURE:	N.D.	**VISCOSITY, DYNAMIC:**	>500 mPa.s @ 25 °C
ODOR THRESHOLD:	N.D.	**VISCOSITY, KINEMATIC:**	>463 mm2/s @ 25 ˚C

SOLUBILITY IN H2O:		**VOLATILE BY WEIGHT:**	29.12 %
pH:	N.A.	**VOLATILE BY VOLUME:**	35.30 %
FREEZE POINT:	**N.D.**	**VOC CALCULATED:**	2.51 lb/gal, 301 g/1
COEFFICIENT OF WATER/OIL DISTRIBUTION:	**N.D.**		

LEGEND: N.A. - Not Applicable, N.E. - Not Established, N.D. - Not Determined

10. STABILITY AND REACTIVITY

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur under normal conditions.

STABILITY: Product is stable under normal storage conditions.

CONDITIONS TO AVOID: High temperatures. Sources of ignition.

INCOMPATIBILITY: Amines, acids, water, hydroxyl, or active hydrogen compounds.

HAZARDOUS DECOMPOSITION PRODUCTS: Monomeric isocyanate, traces of hydrogen cyanide, nitrogen dioxide, Carbon monoxide, carbon dioxide, Metal oxides

11. TOXICOLOGICAL INFORMATION

EXPOSURE PATH: Refer to section 2 of this SDS.

SYMPTOMS: Refer to section 2 of this SDS.

TOXICITY MEASURES:

Chemical Name	**LD50/LC50**
High Molecular Polymers	N.A.
N-Butyl Acetate	Oral LD50: Rat 1,670 mg/kg Oral LD50: Rat 1,600 mg/kg Dermal LD50: Rabbit 12600 µL/kg Dermal LD50: Rabbit 12.6 mL/kg Inhalation LC50: Rat >2000 ppm/4 h
Titanium dioxide	Oral LD50: Rat > 10,000 mg/kg GHS LC50 (vapour): rat 55 mg/1 /
Toluene diisocyanate	Oral LD50: Rat 3,060 mg/kg Dermal LD50: Rabbit 10,000 mg/kg Inhalation LC50: Rat 0.099 mg/1 **/4** h

Germ cell mutagenicity: No classification proposed

Carcinogenicity: Category 2 - Suspected of causing cancer.
Components contributing to classification: Titanium dioxide. Toluene diisocyanate.

Reproductive toxicity: Category 2 - Suspected of damaging fertility or the unborn child. May cause harm to breast-fed children.
Components contributing to classification: Toluene.

12. ECOLOGICAL INFORMATION

ECOTOXICITY:

Chemical Name	**Ecotoxicity**
Toluene	Fish: Pimephales promelas 15.22 - 19.05 mg/I96 h flow-through
	Pimephales promelas 12.6 mg/196 h Static Oncorhynchus mykiss 5.89 - 7.81 mg/196 h flow-through Oncorhynchus mykiss 14.1 -17.16 mg/196 h Static Oncorhynchus mykiss 5.8 mg/I96 h semi-static Lepomis macrochirus 11.0 - 15.0 mg/196 h Static

	Oryzias latipes 54 mg/196 h Static Poecilia reticulata 28.2 mg/196 h semi-static Poecilia reticulata 50.87 - 70.34 mg/196 h Static Invertebrates: Daphnia magna 5.46 - 9.83 mg/148 h Static
	Daphnia magna 11.5 mg/148 h Plants: Pseudokirchneriella subcapitata > 433 mg/196 h
	Pseudokirchneriella subcapitata 12.5 mg/172 h Static
N-Butyl Acetate	Fish: Pimephales promelas 126 - 137 mg/196 h flow-through
Titanium dioxide	N.D.
Toluene diisocyanate	N.D.

PERSISTENCE AND DEGRADABILITY: Not determined for this product.

BIOACCUMULATIVE: Not determined for this product.

MOBILITY IN SOIL: Not determined for this product.

OTHER ADVERSE EFFECTS: Not determined for this product.

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dispose of contents/container in accordance with waste/disposal laws and regulations of your country or particular locality. Disposal should be done in accordance with Federal (40CFR Part 261), state and local environmental control regulations. If waste is determined to be hazardous, use licensed hazardous waste transporter and disposal facility.

14. Transportation Information

US DOT Road
DOT Proper Shipping Name: Butyl Acetate
DOT Hazard Class: 3
SECONDARY HAZARD: None
DOT UN/NA Number: 1123
Packing Group: III
Emergency Response Guide Number: 128

IATA Cargo
PROPER SHIPPING NAME: Butyl Acetate
DOT Hazard Class: 3
HAZARD CLASS: None
UN-NUMBER: 1123
PACKING GROUP: III
EMS: 3L

IMDG
PROPER SHIPPING NAME: Butyl Acetate
DOT Hazard Class: 3
HAZARD CLASS: None
UN-NUMBER: 1123
PACKING GROUP: III
EMS: F-E

The listed transportation classification applies to US DOT Road, IATA Cargo, and IMDG non-bulk shipments. It does not address regulatory variations due to changes in package size, mode of shipment or other regulatory descriptors. For the most accurate shipping information, refer to your transportation/compliance department.

15. REGULATORY INFORMATION

U.S. FEDERAL REGULATIONS: AS FOLLOWS:

SARA SECTION 313
This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendment and Reauthorization Act of 1986 and 40 CFR part 372.:

Chemical Name	CAS Number	Weight % Less Than
N-Butyl Acetate	123-86-4	40 %

TOXIC SUBSTANCES CONTROL ACT:

INVENTORY STATUS
The chemical substances in this product are on the TSCA Section 8 Inventory.

EXPORT NOTIFICATION
This product contains the following chemical substances subject to the reporting requirements of TSCA 12(B) if exported from the United States:
NONE

16. OTHER INFORMATION

Under HazCom 2012 it is optional to continue using the HMIS rating system. It is important to ensure employees have been trained to recognize the different numeric ratings associated with the HazCom 2012 and HMIS schemes.

HMIS RATINGS - HEALTH: 2* FLAMMABILITY: 3 PHYSICAL HAZARD: 0 * -
Indicates a chronic hazard; see Section 2

Revision: New GHS SDS Format

Effective Date: 04/30/2024

DISCLAIMER

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