SAFETY DATA SHEET

NORMAC ADHESIVE PRODUCTS INC.

600R

Section 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Products Name: 600R

Chemical Family: Synthetic elastomers and organic solvents

Applications: Adhesive

Supplier's Name: Normac Adhesive Products Inc.

1350 Heine Court

Burlington, Ontario, Canada, L7L 6M4 Tel: (905) 332-6455 Fax: (905) 332-6880

Prepared by: Regulatory Affairs Group of Normac Adhesive Products Inc.

Preparation Date of SDS: October 25, 2018

24 Hour Emergency Telephone Number (Canutec): (613) 996-6666

Section 2 – HAZARD(S) IDENTIFICATION

WHMIS Hazardous Class: B2 FLAMMABLE LIQUIDS

D2A VERY TOXIC

D2B TOXIC EYE AND SKIN IRRITANT

NFPA RATINGS: HEALTH 2; FLAMMABILITY 3; INSTABILITY: 0
HMIS RATINGS: HEALTH 2; FLAMMABILITY 3; INSTABILITY: 0

Target Organs

Bladder, Liver, Kidney, Brain

GHS Classification

Flammable liquids (Category 2) Skin corrosion/irritation (Category 3)

Serious eye damage/eye irritation (Category 2A)

Specific target organ toxicity - single exposure (Category 3), Central nervous system

Skin irritation (Category 2)

Reproductive toxicity (Category 2)

Specific target organ toxicity - repeated exposure (Category 2)

Aspiration hazard (Category 1)
Acute aquatic toxicity (Category 2)

Signal word: **DANGER**

Hazard Statements

H225 Highly flammable liquid and vapour.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H336 May cause drowsiness or dizziness.

H361 Suspected of damaging fertility or the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure. H401 Toxic to aquatic life.

Precautionary Statements

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P261 Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

P281 Use personal protective equipment as required.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER or doctor/ physician.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P331 Do NOT induce vomiting.

GHS Labeling

Pictograms







Section 3- COMPOSITION / INFORMATION ON INGREDIENTS

	Cas No.	Percentage (W/W)	Exposure Guid ACGIH TLV TLV-TWA	elines OSHA PEL-STEL
Acetone	67-64-1	40-70*	500 ppm 1000 ppm	Not Listed
Toluene	108-88-3	30-60*	20 ppm 200 ppm	300 ppm

^{*}Exact percentages are withheld as a trade secret however the health and environmental hazard effects stated in this SDS describe the effects of the highest concentration of each ingredient; in compliance with (ST/SG/AC.10/30/Rev.6) and (29 CFR 1910.1200).

Section 4 - FIRST AID MEASURES

Eye Contact: Immediately flush eyes with gently flowing water for at least 15 minutes or until the chemical is removed. Hold eyelids open during flushing. Take care not to rinse the contaminated water into the

unaffected eye or face. Seek immediate medical attention.

Skin Contact: Remove contaminated clothing, including shoes, after flushing with

water has begun. Flush with copious amounts of water. If irritation

persists or signs of toxicity occur, seek medical attention.

Inhalation: Move victim to fresh air. If the affected person is not breathing,

apply artificial respiration. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation (CPR) immediately. Obtain medical attention IMMEDIATELY. This

material can cause lung damage.

Ingestion: Seek immediate medical attention. Do NOT Induce vomiting. Do

not attempt to give anything by mouth to an unconscious or convulsing person. This material is an aspiration hazard. Can enter lungs and cause damage. If spontaneous vomiting occurs, have victim lean forward with head down to avoid aspirating the liquid into the lungs. Administer artificial respiration if breathing has stopped. If the heart has stopped, trained personnel should begin cardiopulmonary resuscitation (CPR) immediately.

Note to Physician: This product contains materials that may cause severe pneumonitis

if aspirated. Treatment based on sound judgment of physician and

individual reactions of patient.

Section 5 – FIRE FIGHTING MEASURES

Flash Point: -25°C

(Tag Closed cup) Flash Point Method:

Auto Ignition Temp: >465°C

Flammable Limits in air (%): Lower: 1.4% Upper: 12.8%

Extinguishing Media: Use DRY Chemicals. CO2. alcohol foam or water spray. This material may produce a floating fire hazard in extreme fire

conditions.

Special Exposure Hazards: May release flammable mixtures when Flammable Liquid.

temperatures are at or above the flash point. Toxic gases will form upon combustion. Closed containers may explode when exposed to extreme heat. Isolate and restrict area access. Stop leak only if safe to do so. Move containers from fire area if you can do so without risk. Fight fire from a safe distance and from a protected location. Use fine water spray or fog to control fire spread and cool adjacent structures or containers. This material may produce a floating fire hazard in extreme fire conditions. Vapours are heavier than air and may accumulate in low areas. Vapours may travel a considerable distance along the ground where they can ignite, flashback or explode. May create vapour/air explosion hazard indoors, outdoors and, in sewers. Do no allow runoff to enter

waterways or sewer.

Hazardous Decomposition/

Combustion Materials:

A Complex mixture of airborne solids, liquids, gases including carbon monoxide, carbon dioxide, and unidentified hydrocarbon fragments

will be evolved when this material undergoes combustion.

Respiratory and eye protection as well as protective clothing **Special Protective Equipment:**

> required for fire fighting personnel. Full protective equipment and self-contained breathing apparatus (SCBA) should be used in all

indoor and any large outdoor fires.

NFPA RATINGS: HEALTH 2; FLAMMABILITY 3; INSTABILITY: 0 **HMIS RATINGS:** HEALTH 2; FLAMMABILITY 3; INSTABILITY: 0

Section 6 – ACCIDENTAL RELEASE MEASURES

Personal Precautionary Measures: Wear appropriate protective equipment.

Environmental Precautionary Measures: Prevent entry into sewers or streams, dike if needed.

Consult Local authorities.

Procedure for Clean Up: Flammable liquid. Isolate hazard area and restrict access. Stop

leak only if it is safe to do so. Eliminate all sources of ignition and work only with non-sparking tools. Small Spills: soak up with non-combustible absorbent material and scoop into containers. Large Spills: Prevent contamination of waterways. Dike and pump into suitable containers. Clean up residual with absorbent material. Place in appropriate container. Notify applicable government authority if release is reportable or could adversely affect the environment. Ventilate the area thoroughly.

Section 7 – HANDLING AND STORAGE

Handling: Flammable. For industrial use only. Handle and open containers

with care. Open container slowly to relieve pressure. Avoid contact with eyes, skin and clothing. Do not ingest. Avoid inhalation of chemical. DO NOT handle or store near an open flame, heat, or other sources of ignition. Fixed equipment as well as transfer containers and equipment should be grounded to prevent accumulation of static charge. DO NOT pressurize, cut, heat or weld Empty containers may contain hazardous product containers. residues. Keep the containers closed when not in use. Protect against physical damage. Use appropriate personal protective Electrostatic charges may be generated during pumping. Electrostatic discharge may cause fire. Ensure electrical continuity by bonding and grounding (earthing) all equipment. Restrict line velocity during pumping in order to avoid generation of electrostatic discharge. Avoid splash filling. Do NOT use compressed air for filling, discharging, or handling operations.

Extinguish any naked flames.

Storage: Store in a cool, dry, well ventilated area, away from heat and ignition

sources. Keep containers tightly closed. Store out of direct sunlight

and on an impermeable floor.

Empty Containers: May contain liquid and vapour residue and may be dangerous.

"Empty" drums should be completely drained, properly sealed and promptly disposed of in accordance with governmental regulations.

Section 8 - EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering Controls: Local exhaust ventilation is recommended to maintain exposure to

within applicable limits (below TLV(s)). Use explosion proof equipment. Make up air should be supplied to balance air that is removed by local or general exhaust ventilation. Ventilate low lying areas such as sumps or pits where dense vapours may collect. Use

explosion proof ventilation equipment.

Respiratory Protection: If exposure exceeds occupational exposure limits, use an

appropriate NIOSH approved respirator. In case of spill or leak resulting in unknown concentration, use a NIOSH approved supplied

air respirator.

Gloves: Impervious chemical resistant gloves.

Skin Protection: Skin contact should be prevented through the use of suitable

protective clothing, gloves and footwear, selected for conditions of use and exposure potential. Consideration must be given both to

durability as well as permeation resistance.

Eyes: Chemical goggles; also wear a face shield if splashing hazard exists.

Other Personal Protective Data: Ensure that eyewash stations and safety showers are proximal to the

work station location.

Ingredients Exposure Limit Exposure Limit IDLH *

ACGIH TLV OHSA TLV-TWA PEL-STEL

Acetone 500 ppm 1000 ppm Not Listed Not Available Toluene 20 ppm 200 ppm 300 ppm 500 ppm

*Immediately Dangerous to Life and Health

Section 9 – PHYSICAL AND CHEMICAL PROPERTIES

Physical State: Liquid.

Colour: Translucent off-white

Odour: Mild odour Specific Gravity: 0.86 (water = 1)

Boiling Point: 59 °C Melting/Freezing Point: <-7°C % Volatility: 82% (v/w)

Vapour Pressure: 144 mm Hg. @ 20°C

Vapour Density:2.3 (Air = 1.0)Viscosity:Not Available

VOCs: 520 G/L (4.3 Lbs./Gal. – SCAQMD Rule 1168)

Odour threshold: Not Available Solubility: Not soluble.

Evaporation Rate: Slower than ethyl ether.

Section 10 - STABILITY AND REACTIVITY

Chemical Stability: Stable under normal conditions.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: High temperatures, sparks, open flames and all sources of ignition.

Materials to Avoid: Oxidizing agents. Strong bases. Strong alkalis. Reducing agents.

Chloroform, nitric compounds, peroxides, sulphur dichloride.

Hazardous decomposition Products: Under fire conditions, carbon monoxide, carbon dioxide, smoke,

fumes, and hydrocarbon fragments can be released.

Section 11 – TOXICOLOGICAL INFORMATION

Chronic: Liver and kidney damage. May cause corneal opacity. May cause

central nervous system depression causing headaches, nausea, dizziness and, in extreme cases, convulsions and coma. May cause

birth defects.

Principle Routes of Exposure:

Ingestion: May cause severe injury to intestinal tract, liver, kidneys, stomach,

throat, lungs, mouth and mucous membranes. Aspiration hazard! Small amounts aspirated into the lungs during ingestion or vomiting may cause lung injury, possibly leading to death. Symptoms of aspiration into the lungs include coughing, gasping, choking, shortness of breath, bluish discoloured skin, rapid breathing and heart rate. Chemical pneumonitis from aspiration may result in fever. Pulmonary edema or bleeding, drowsiness, confusion, coma

and seizures may occur in more serious cases. Symptoms may develop immediately or as late as 24 hours after the exposure,

depending on how much chemical entered the lungs.

May cause moderate skin irritation. Burning sensation may result. Repeated or prolonged contact may cause defatting and drying of the skin which may result in skin irritation and dermatitis. Skin absorption of material may cause systemic toxicity.

Respiratory irritation signs and symptoms may include a temporary burning sensation of the nose and throat, coughing and difficulty breathing. If material enters lungs, signs and symptoms may include coughing, choking, wheezing, difficulty in breathing, chest congestion, shortness of breath and fever. High concentrations may cause central nervous system depression resulting in headaches, dizziness and nausea; continued inhalation may result in

unconsciousness and/or death.

Causes eye irritation. Symptoms of exposure may include: a burning sensation, redness, swelling and blurred vision. May damage eyes.

Oral LD50: Dermal LD50: Inhalation LC50

Toluene: 636 mg/kg (rat) 12.1 g/kg (rabbit) 400 ppm/24 hr. (mouse)

Acetone: 5,800 mg/kg (rat) 20 g/kg (rabbit) 16,000 ppm (rat)

IARC - Not Suspected as a human carcinogen. Carcinogenicity:

ACGIH – Toluene is Listed.

OSHA – Not Suspected as a human carcinogen. NTP - Not Suspected as a human carcinogen.

Carcinogenicity Comment: This product contains the following chemicals known to the state of

California (Proposition 65) to cause cancer or reproductive toxicity:

Toluene.

Skin Contact:

Inhalation:

Eye Contact:

Material:

Reproductive Toxicity/ Terratogenicity/Embryotoxicity/ Mutagencity:

Toluene: is fetotoxic in rats and mice at maternally toxic levels.

Significant fetal effects included skeletal anomalies (fused vertebrae and extra ribs) in animals exposed to doses of 1000 mg/m³ toluene for 24 hours/day and retarded skeletal development in animals exposed to 1000 mg/m³ for 8 hours/day. In mice, mean fetal weight was significantly reduced, and the percentage of weight retarded fetuses was significantly increased at the 500 mg/m³ exposure level. Fetotoxic effects in rats occurred at 1500 and 3000 ppm and included decreased litter and mean fetal body weights and decreased sternebrae ossification. Significant fetal effects at 2000 ppm included reduced pup weight, high fetal mortality and embryonic growth retardation. Effects seen in fetuses from pregnant rats administered toluene by gavage included reduced body weight and organ weight producing a generalized growth retardation. In mice exposed to 200 ppm toluene, the incidence of fetuses with dilated renal pelves was significantly increased. suggesting desynchronization of maturation with respect to development and

Acetone: Studies on 891 women has shown an increased risk of miscarriage.

Section 12 - ECOLOGICAL INFORMATION

Ecotoxicological Information: Ecotoxicity - Fish Species Acute Crustaceans **Ecotoxicity** Freshwater Algae Data

Toxicity:

Toluene: LC50 (Lepomis macrochirus) Not Available EC50 (Selenastrum) 13 mg/L capriocernutum)

433mg/L

LC50 (Pimephales promelas)

25 mg/L

Other Information: Do not allow product or runoff from fire to enter storm or sanitary

> sewers, lakes, rivers, streams or public waterways. Block off drains and ditches. Spill areas must be cleaned and restored to original condition or to the satisfactions of authorities. May be harmful to

aquatic life. Highly volatile, will partition rapidly to air.

Section 13 – DISPOSAL CONSIDERATIONS

Disposal of Waste Method: Disposal of all wastes must be done in accordance with local,

state/provincial and federal regulations.

Contaminated Packaging: Empty containers should be recycled or disposed of through an

approved waste management facility.

Section 14 – TRANSPORT INFORMATION

Proper Shipping Name: ADHESIVES (containing flammable liquid)

Hazard Class:

UN Number: UN 1133

Packing Group: Ш

TDG (IATA and IMO): Cl. 3 UN 1133 PG. II

Hazard Label / Placards: **FLAMMABLE**

Section 15 – REGULATORY INFORMATION

U.S. TSCA Inventory Status: All compounds of this product are either on the Toxic Substances

Control Act (TSCA) Inventory List or exempt.

Canadian DSL Inventory Status: All compounds of this product are either on the Domestic

Substances List (DSL); the Non- Domestic Substances List (NDSL)

or exempt.

Note: Not available.

US Regulatory Rules

CECLA/SARA SARA (311, 312) CERCLA/SARA Section 302: Hazard Class: Section 313:

Listed Components of 600R: Not Listed Listed

California Proposition 65: Listed.

MA Right to Know List: Listed.
New Jersey Right-to-know List: Listed.
Pennsylvania Right to Know List: Listed.

WHMIS Hazardous Class: B2 FLAMMABLE LIQUIDS

D2A VERY TOXIC

D2B TOXIC EYE AND SKIN IRRITANT

NFPA RATINGS: HEALTH 2; FLAMMABILITY 3; INSTABILITY: 0 HMIS RATINGS: HEALTH 2; FLAMMABILITY 3; INSTABILITY: 0

Section 16 – OTHER INFORMATION

All employees or contractors etc. who use this product must have access to this Safety Data Sheet.

This information is furnished without warranty, representation, inducement or licence of any kind, except that it is accurate to the best of Normac Adhesive Products Inc. knowledge or is obtained from sources believed by Normac Adhesive Products Inc. to be accurate. Normac Adhesive Products Inc. makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use or reliance on same. Customers are encouraged to conduct their own tests.

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PREPARED BY: Regulatory Affairs Group

*****END OF SDS***** SDS Code: 600R - 14