

SAFETY DATA SHEET

According to EC directive 1907/2006/EC

Article 31

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FCR-636

1. Material / preparation and company designation

Company: POLYURETHANE DIVISION
TEXTILE RUBBER & CHEMICAL CO.
1300 Tiarco Drive
Dalton, GA 30720

Emergency phone (CHEMTREC): (800) 424-9300 **(CHEMTREC INTERNATIONAL):** (703) 527-3887
Industrial Health/Spill Emergency: (706) 277-1300 Danny Welch (dwelch@trcc.com)

Date Printed: 09/26/2012

Date Revised: N/A

Supercedes: N/A

Usage: Industrial

2. Possible hazards

This material may irritate the eyes upon contact. If swallowed, may be aspirated and cause lung damage. Excessive exposure may result in eye, skin or respiratory irritation. May cause central nervous system depression. This product is not for human consumption; use proper precautions.

3. List / data of components

Information on hazardous ingredients: Isopropyl Alcohol CAS#67-63-0. Refer to Section 15: Regulations

Chemical name: FCR-636

Product code: FCR-636

CAS-no. 67-63-0

EC-no.: 200-661-7

Formula: Solvent

%w/w

Hazard symbol: F, Xi

H-phrases: N/A

P-phrases: P273

See section 16 for the full text of the Hazard symbols and Phrases.

4. First aid measures

Inhalation: Remove to fresh air immediately and immediately obtain medical attention from a licensed healthcare professional.

Skin contact: Wash affected area immediately in flowing water (warm if readily available) for at least 15 minutes (carefully remove contaminated or protective clothing while washing) and immediately obtain medical attention from a licensed healthcare professional. Wash clothing before reuse. Destroy items that cannot be decontaminated, including leather articles such as shoes, belts and watchbands.

Eye contact: Flush eyes immediately with plenty of water for 15 minutes including under upper and lower eyelids. Washing eyes within one minute is essential to achieve maximum effectiveness. Remove contact lenses after the first 5 minutes. Immediately obtain medical attention from a licensed healthcare professional.

Ingestion: Never give anything by mouth if victim is unconscious or having convulsions; obtain immediate medical attention from a licensed healthcare professional. Do not induce vomiting unless directed to do so by medical personnel.

Note to Physician: If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.

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5. Measures in case of fire

Suitable extinguishing media: Foam, CO₂, Dry Chemical, Water Fog. Do not use straight streams of water. Eliminate ignition sources. If a leak or spill has not ignited, use water spray to disperse the vapors and to protect personnel attempting to stop a leak. Prevent runoff from fire control or dilution from entering streams, sewers or drinking water supply.

Hazardous decomposition/combustion products: Material does not decompose at ambient temperatures. When heated to decomposition, this product should produce normal hydrocarbon combustion products, smoke fume. May produce incomplete combustion products. May decompose in heat/fire releasing products of greater hazard. Products of thermal decomposition may be harmful.

Special protective equipment for fire fighters: Firefighters should wear NIOSH-approved self-contained breathing apparatus with full face piece, operated in positive pressure mode. Wear full firefighting protective clothing. Use water fog to cool containers exposed to extreme heat.

Other information: Highly flammable. Material can release vapors that readily form flammable mixtures. Vapor accumulation could flash and/or explode if ignited. Vapors are flammable and heavier than air. Vapors may travel across the ground and reach remote ignition sources causing a flashback fire danger. Hazardous material. Care should be taken to avoid exposure to liquid product in fire. Burning material may emit toxic fumes and smoke. Do not breathe smoke.

6. Accidental release procedures

personal precautions: Prevent entry into basements or confined spaces. Use protective equipment. NIOSH-approved Self-contained breathing apparatus must be available in case of emergency. Use caution to avoid falls. Do not touch or walk through spilled material. A vapor suppressing foam may be used to reduce vapors.

environmental precautions: Ventilate area and evacuate non-essential personnel. Water spray may reduce vapor but may not prevent ignition in closed spaces. Dike and contain spill for possible recovery and to prevent from entering waterways. Eliminate sources of ignition from the spill area. US regulations may require reporting releases of this material. Seek the advice of a specialist before using dispersants.

methods for cleaning up / taking up: Recover as much as possible. Smaller spills may be wiped from surfaces or absorbed onto inert material and handled as solid waste. Use clean, non-sparking tools to collect absorbed material. Place discarded material in closed, labelled containers for disposal. Do not allow material into sewers, on the ground or into any body of water. Measurement of certain physical properties and analysis for regulated components may be necessary to make a determination for product meeting the criteria of a hazardous waste. When a decision is made to discard this material as supplied, it is classified as a RCRA hazardous waste (Code D001 Ignitable Waste) under current RCRA regulations as defined in 40CFR261.33 and should be sent to a RCRA approved incinerator or disposed in a RCRA approved waste facility. Must be disposed of in accordance with all local, state, federal and international regulations.

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7. Handling and storage

Adhere to work practice rules established by government regulations (e.g. OSHA). Use non-sparking tools and explosion-proof equipment. Potentially toxic/irritating fumes/vapors may evolve from heated or agitated material. Use only with adequate ventilation. Use proper bonding and/or grounding procedures.

Advice on protection against fire and explosion: Highly flammable. Material can release vapors that readily form flammable mixtures. Vapor accumulation could flash and/or explode if ignited. Vapors are flammable and heavier than air. Vapors may travel across the ground and reach remote ignition sources causing a flashback fire danger. Hazardous material. Care should be taken to avoid exposure to liquid product in fire. Burning material may emit toxic fumes and smoke. Do not breathe smoke.

Storage requirements: Ample fire water supply should be available. Use care to avoid skin and eye contact. Do not swallow. Avoid breathing vapors. Do not eat, drink or smoke in working area. Food, beverages, and tobacco products should not be carried, stored, or consumed where this material is in use. Keep containers tightly closed when not in use. Protect containers against physical damage. Store in a cool, dry, well-ventilated area preferably surrounded by dikes to contain spills or leaks. Outside or detached storage preferred. Open containers slowly in order to control possible pressure release. Storage containers should be grounded and bonded and drums should be equipped with self-closing valves, pressure vacuum bungs and flame arresters. Unsuitable materials and coatings: Aluminium, cast iron, polystyrene, ethylene-propylene-diene monomer (EPDM), Monel, Butyl rubber, Natural rubber. 'Empty' containers retain product residue (liquid and/or vapor) and should be handled with caution. Any use of this product in a process should be evaluated to establish and maintain safe operating procedures.

8. Engineering controls

Exposure limits: Consult local authorities for acceptable exposure limits. OSHA TWA = 400 ppm

Respiratory protection: If necessary, use NIOSH-approved respiratory protection. Recommended Local exhaust. Exhaust systems should be designed to move the air away from the source of vapor/aerosol generation and people working at this point. Ventilation must be adequate to maintain contaminant concentration below permissible exposure limits. Use explosion-proof ventilation equipment. Ventilation should be in accordance with OSHA regulations. Properly maintain and have readily available an eyewash/safety shower facility in the work area.

Hand protection: Use gloves impervious to this material. The breakthrough time of the selected glove(s) must be greater than the intended use period. NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provide by the glove supplier. Before eating, drinking, smoking or using the toilet, wash face and hands thoroughly with soap and water.

Eye protection: Recommended the use of Chemical Splash Goggles (vapor proof). If splashing is likely, wear a face shield in addition to the Chemical Splash Goggles.

Skin and body: Impervious long-sleeved clothing without cuffs is recommended. Wear proper safety boots. If prolonged or repeated contact is likely, chemical and oil resistant clothing is recommended. Contaminated clothing and shoes should be cleaned before reuse or disposed of as necessary. It is recommended that a shower be taken after completion of workshift, especially if significant contact has occurred. Street clothing should be stored separately from work clothing and protective equipment. Work clothing and shoes should not be taken home.



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9. Physical and chemical data

Test method:

Form: Liquid
Colour: Clear, colorless
Odour: Alcohol
Boiling point/range: 82 – 83°C (180 – 181°F)
Melting point/range: No information available.
Flash point: 12°C (54°F)
Flammability: *Flammable Limits in Air by Volume:* Lower – 2.0; Upper – 12.7
Autoignition temperatures: >350°C (662°F)
Explosion limits: No information available.
Vapour pressure: 4.3 kPa (32.25 mmHg) @20°C/68°F; 12.8 kPa (96 mmHg) @ 38°C/100°F;
23.9 kPa (179.25 mmHg) @ 50°C/122°F
Density: 786 kg/m³ (typical)
Solubility in water: Complete
Solubility in other solvents: No information available.
pH: No information available.
Partition coefficient (Coefficient of Therm. Expansion) : No information available.
n-octanol/water: No information available.

ASTM D-56

10. Stability and reactivity data

Conditions to avoid: Stable under normal conditions. Material is hygroscopic. Avoid freezing, heat, sparks, open flames or sources of ignition. Hazardous polymerization will not occur.

Materials to avoid: Avoid strong oxidizing materials, aldehydes, amines, caustics, chlorinated compounds, alkanolamines.

Hazardous decomposition products: Material does not decompose at ambient temperatures. When heated to decomposition, this product should produce normal hydrocarbon combustion products, smoke fume. May produce incomplete combustion products. May decompose in heat/fire releasing products of greater hazard. Products of thermal decomposition may be harmful.

11. Toxicological properties

Acute toxicity data:

Oral LD50: Based on literature, minimally toxic.

Dermal LD50: Based on literature, minimally toxic.

Inhalation LC50: Based on literature, minimally toxic.

Irritation

Skin: Based on literature, with prolonged exposure, mildly irritating.

Eye: Based on literature, irritating and will injure eye tissue.

Sensitization: No information available.

Genotoxicity: No information available.

Other toxicological information (Based on literature) : Vapor concentrations above recommended exposure levels are irritating to the eyes and the respiratory tract, may cause headaches and dizziness, are anesthetic and may have other central nervous system effects. Prolonged and/or repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis. Small amount of liquid aspirated into the lungs during ingestion or from vomiting may cause chemical pneumonitis or pulmonary edema. Elevated temperatures or mechanical action may form vapors, mist or fumes which may be irritating to the eyes, nose, throat or lungs.



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12. Ecological properties

Ecotoxic effects: Not expected to be harmful to aquatic organisms. Expected to be readily biodegradable. Expected to degrade at a moderate rate in air.

Fish: No information available.

Daphnia: No information available.

Algae: 96h-EC50 (Cell count): No information available.

13. Disposal conditions

product: Do not allow material into sewers, on the ground or into any body of water. Measurement of certain physical properties and analysis for regulated components may be necessary to make a determination for product meeting the criteria of a hazardous waste. Empty containers retain product residue (liquid and/or vapor) and should be handled with caution. When a decision is made to discard this material as supplied, it is potentially classified as a RCRA hazardous waste (Code D001 Ignitable Waste) under current RCRA regulations as defined in 40CFR261.33 and should be sent to a RCRA approved incinerator or disposed in a RCRA approved waste facility. Must be disposed of in accordance with all local, state, federal and international regulations.

Contaminated packaging: Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to heat, flame, sparks, static electricity or other sources of ignition. They may explode and cause injury or death.

Waste code number: Please refer to your specific industry in the EUROPEAN WASTE CATALOGUE.

14. Transport information

Shipping descriptions may vary based on mode of transport, quantities, package size, and/or origin and destination. Consult your company's Hazardous Materials/Dangerous Goods expert for information specific to your situation.

Land transport ADR/RID and GGVS/GGVE

ADR class:

ADR/RID packing group: II

RID class:

Hazard identification: 3

Substance identification no.:

UN no.: 1219

Proper shipping name: Isopropanol

Marine transport IMDG / GGV See

IMDG-code class: 3

Packing group: II

UN-no.: 1219

subsidiary risk:

EMS:

Marine pollutant:

Proper shipping name: Isopropanol

Air transport ICAO-TI und IATA-DGR

class: 3

UN-no.: 1219

Packing group: II

Proper shipping name: Isopropanol

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15. Regulations

This section is not meant to be all-inclusive; selected regulations are represented.

SARA 313 SECTION OF TITLE III OF THE SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT OF 1986 AND 40 CFR PART 372:

To the best of our knowledge, this product does not contain substance(s) above the de minimus level which require reporting under this statute.

COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION AND LIABILITY ACT OF 1980 (CERCLA, OR SUPERFUND):

To the best of our knowledge, this product does not contain any substance(s) listed as "Hazardous Substances" which are subject to CERCLA Section 103 reporting requirements and which are listed in 40 CFR 302.4.

OSHA HAZARD COMMUNICATION STANDARD:

This product is a "Hazardous Chemical" as defined under the criteria of the Federal OSHA Hazard Communication Standard, 29 CFR 1910.1200.

RESOURCES CONSERVATION AND RECOVERY ACT (RCRA) CLASSIFICATION:

Measurement of certain physical properties and analysis for regulated components may be necessary to make a determination for product meeting the criteria of a hazardous waste. When a decision is made to discard this material as supplied, it may be potentially classified as a RCRA hazardous waste (Code D001 Ignitable Waste) under current RCRA regulations as defined in 40CFR261.33 and should be sent to a RCRA approved incinerator or disposed in a RCRA approved waste facility.

CHEMICAL INVENTORY:

United States-All components of this product are on the Toxic Substance Control Act (TSCA) inventory or are exempt from TSCA Inventory requirements under 40 CFR 720.30.

Labelling in accordance with EC directives / German regulations

Labelling

EC-no.: 200-661-7

Symbols: F, Xi

R-phrases: R11, R36, R67

S(afety) phrases: S2, S7, S16, S24/25, S26, S61

Water hazardous class (Germany) (WGK): N/A

See section 16 for the full text of the Hazard symbols and Phrases.



Polyurethane Group
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16. Other information:

Hazardous Material Identification System (HMIS) rating/codes:

Health - 1 Flammability - 3 Reactivity - 0 Protective Equipment - X (Ask supervisor)

HMIS uses a numbering scale ranging from 0 - 4 to indicate the degree of hazard.

Values: 0 = Minimal 1 = Slight 2 = Moderate 3 = Serious 4 = Extreme

An asterisk (*) indicates chronic health hazards are associated with the chemical.

The proper protective equipment is identified with a letter corresponding to equipment listed after in parentheses.

Legend:

- F - Flammable substance
- H225 - Highly flammable liquid and vapour
- H320 - Cause eye irritation
- H336 - May cause drowsiness and dizziness
- P102 - Keep out of reach of children
- P210 - Keep away from heat/sparks/open flames/hot surfaces - No smoking
- P233 - Keep container tightly closed
- P262 - Do not get in eyes, on skin or on clothing
- P273 - Avoid release to the environment
- P305+351+338 - If in eyes: rinse continuously with water for several minutes. Remove contact lenses if present and easy to do - continue rinsing
- P337+313 - Get medical advice/attention
- R11 - Highly flammable
- R36 - Irritating to eyes
- R67 - Vapors can cause drowsiness and dizziness
- S2 - Keep out of reach of children
- S7 - Keep container tightly closed
- S16 - Keep away from sources of ignition - No smoking
- S24/25 - Avoid contact with skin and eyes
- S26 - In case of contact with eyes, rinse immediately with plenty of water and seek medical advice
- S61 - avoid release to the environment
- Xi - Irritating substance

Do not handle until the Manufacture's Safety Precautions have been read and understood. The safety data sheet is only intended to give a description of products with regard to safety requirements. The information contained herein is based on data considered accurate. However, it is not to be taken as a warranty or representation for which Textile Rubber & Chemical Co. or Polyurethane Division assumes legal responsibility. Any use of this information and data must be determined by the user to be in accordance with applicable international, federal, state and local laws and regulations.