SECTION I - IDENTIFICATION

Product identifier: Kastalon Polyurethane
Relevant identified uses: For industrial or professional use only.
Supplier: Kastalon Inc.
        4100 W. 124th Place
        Alsip, IL 60803-1876
Emergency telephone number: 708-389-2210
Telephone for information: 708-389-2210
Website: www.kastalon.com

SECTION II - HAZARD(S) IDENTIFICATION

Classification of the substance or mixture: While this material is not considered hazardous according to the OSHA Hazard Communication Standard (29CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available.

Label Elements
Trade name: Kastalon Polyurethane
Signal Word: None
Hazard statement(s): None
Pictograms: None
Precautionary statement(s): None

Description of any hazards not otherwise classified:

Acute: Fumes from hot work on or near polyurethane products can be irritating and lead to coughing. These fumes could contain traces of TDI, MDI, other isocyanates, and/or MBOCA. Skin or airborne exposure to isocyanates may produce an asthma-like lung sensitization, with shortness of breath, wheezing or cough, which may occur after re-exposure to very low levels. Skin contact with some polyurethane products may result in skin sensitization or an asthma-like lung sensitization.

Chronic: Animal studies indicate that chronic inhalation or overexposure of dusts may cause inflammation of the lungs, fibrosis, and airway destruction.

Severe Immediate Hazards: Dusts from grinding operations may aggravate existing lung disorders when proper protection is not used.

OSHA Regulatory Status: Polyurethane elastomers are fully reacted polymers forming articles which are not considered hazardous under OSHA’s criteria 29 CFR 1910.1200. However, hazardous dusts, vapors, gases, or fumes may be released by mechanical or thermal processing, or by thermal decomposition.

SECTION III - COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient: Cast polyurethane
Moleular weight: Not applicable
CAS number: Not applicable

Ingredient: 4,4’ methylene bis (2-chloroaniline)
Molecular weight: Not applicable
CAS number: 101-14-4

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SECTION IV - FIRST-AID MEASURES

Inhalation: Move to an area free from the risk of further exposure. If not breathing, or breathing is difficult, obtain medical attention.
Skin contact: Wash exposed skin with soap and water.
Eye contact: If dust from grinding causes irritation, rinse with water immediately for 5 minutes. Seek medical attention if irritation persists.
Ingestion: Not a route of exposure.
Most important symptoms and effects, both acute and delayed: Acute: None Delayed: Sensitizing effects possible from dusts/fumes

SECTION V - FIRE-FIGHTING MEASURES

Extinguishing media: Suitable media includes carbon dioxide, dry chemical, foam, or water spray.
Unusual fire and explosion hazards: None
Special information: Toxic and/or irritating fumes can be produced during burning of this material. Decomposition products may be hazardous (see section 10 for details on decomposition products).
Recommended firefighting procedures: Firefighters should wear self-contained breathing apparatus and full protective clothing. Downwind personnel should be evacuated. Do not reseal contaminated containers as pressure buildup may rupture them.

SECTION VI - ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures: Evacuate personnel. Wear suitable PPE as described in section 8.
Environmental precautions: None
Methods and materials for containment and cleaning up: Pick up and handle as any other solid material.

SECTION VII - HANDLING AND STORAGE

Precautions for safe handling: None in normal use.
Conditions for safe storage, including any incompatibilities: Store material at ambient temperature and pressure. Keep away from sources of flame, sparks, or other ignition sources. Material is stable under normal conditions.
Advice on general hygiene practices: Do not eat, drink, and/or smoke in work areas. For industrial or professional use only.

SECTION VIII - EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure limits: There are no applicable exposure limits for cured polyurethane materials. There are limits for TDI and MDI which may be released under some heat processing activities. The current OSHA Permissible Exposure Limit for both TDI and MDI is 0.02 ppm (Ceiling). A ceiling limit is not to be exceeded.
The current American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV) for TDI is 0.005 ppm for an 8 hour TWA, with a 15 minute Short Term Exposure Limit (STEL) of 0.02 ppm. TDI is also indicated as a
SECTION VIII - EXPOSURE CONTROLS/PERSO}NAL PROTECTION (continued)

“Sensitizer” by ACGIH. The 8 hour TLV for MDI is 0.005 PPM TWA. The TLV for TDI is under the 2006 ACGIH notice of intended changes. The proposed change is to lower the TLV for TDI to 0.001 ppm for an 8 hour TWA, with a 15 minute STEL of 0.003 ppm. The proposal for TDI also recommends adding a “Skin” notation and making the cancer designation “A3 – Confirmed Animal Carcinogen with Unknown Relevance to Humans”.

Ventilation system: Local exhaust recommended for thermal processing operations, as required to reduce dust, gas, and vapor fume exposure below OSHA levels.

Eye protection: None required in normal use. Safety glasses with side shields or safety goggles and face shield should be used in grinding operations.

Personal respirators: None required in normal use. For low temperature grinding operations wear a NIOSH approved dust respirator. If generating gas, vapor, and fumes from hot wire, hot knife, or other thermal processing operations (including potentially some grinding operations) wear a NIOSH approved air-purifying respirator with organic vapor cartridge or supplied-air respirator if ventilation is inadequate. Replace cartridge according to respirator manufacturer’s change out schedule.

Skin protection: None required in normal use.

Other protective clothing or equipment: None required in normal use.

Work/hygienic practices: Do not eat, drink, and/or smoke in work areas. Wash hands after use.

SECTION IX - PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Solid</td>
</tr>
<tr>
<td>Freezing/melting point</td>
<td>&gt;150°C (302°F)</td>
</tr>
<tr>
<td>Lower/upper explosive limits</td>
<td>N/A</td>
</tr>
<tr>
<td>Boiling point/range</td>
<td>N/A</td>
</tr>
<tr>
<td>Odor</td>
<td>None</td>
</tr>
<tr>
<td>Flash point</td>
<td>N/A</td>
</tr>
<tr>
<td>Odor threshold</td>
<td>N/A</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor pressure (mm Hg)</td>
<td>N/A</td>
</tr>
<tr>
<td>% Volatiles by volume at 70°F (21°C)</td>
<td>N/A</td>
</tr>
<tr>
<td>Vapor density (Air = 1)</td>
<td>N/A</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol / water</td>
<td>N/A</td>
</tr>
<tr>
<td>pH</td>
<td>N/A</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>N/A</td>
</tr>
<tr>
<td>Relative density</td>
<td>~1.0-1.3 (23°C/73°F)</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>&gt;150°C (302°F)</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Not soluble in water</td>
</tr>
<tr>
<td>Viscosity</td>
<td>N/A</td>
</tr>
</tbody>
</table>

SECTION X - STABILITY AND REACTIVITY

Reactivity and chemical stability: Not reactive under normal use. Stable under normal use/storage conditions.

Hazardous polymerization: Will not occur under normal use/storage conditions.

Conditions to avoid: Exposure to extreme temperatures and contact unwanted contact with incompatible materials should be avoided.

Incompatible materials: Strong acids or bases.

Hazardous decomposition or byproducts: Decomposition through burning produces fumes consisting of organic particulate, gaseous hydrocarbons, carbon dioxide, carbon monoxide and may contain traces of toluene diisocyanate (TDI) or diphenylmethane diisocyanate (MDI), other isocyanates, MBOCA, hydrogen cyanide, acrolein, and oxides of nitrogen.
SECTION XI - TOXICOLOGICAL INFORMATION

Inhalation: No data available  
Ingestion: Non-toxic  
Chronic exposure: No data available  
Aggravation of pre-existing conditions: No data available  
Carcinogenicity: Not listed as a carcinogen  
NTP: No  
Acute toxicity: Non-toxic

Skin contact: Not an irritant  
Eye contact: Not an irritant  
Specific target organ toxicity - single exposure (GHS): No data available  
Specific target organ toxicity - repeated exposure (GHS): No data available  
IARC Monographs: No  
OSHA Regulated: No  
IARC category: None

SECTION XII - ECOLOGICAL INFORMATION

Bioaccumulative potential: No data available  
Ecotoxicity: Not applicable under normal conditions  
Persistence and degradability: Product is not expected to rapidly biodegrade

Mobility in soil: No data available  
Other adverse effects: No data available

SECTION XIII - DISPOSAL CONSIDERATIONS

Waste Disposal Method: Not considered a hazardous material. Dispose of material according to any local, state, and federal regulations.

SECTION XIV – TRANSPORT INFORMATION

UN number: Not regulated  
Proper shipping name: Not regulated  
Special precautions for the user: Not regulated

Hazard class: Not regulated  
Packing group: Not regulated  
environmental hazards: Not regulated  
Transport in bulk information: Not regulated

SECTION XV – REGULATORY INFORMATION

USA
TCSA Status: All ingredients are listed on the TSCA inventory  
SARA Title III, Section 302 Extremely Hazardous Substances: None  
Clean Water Act: N/A  
CERCLA Hazardous Substances and corresponding RQs: N/A

SARA Title III, Section 313 Toxic Chemical: None  
Clean Air Act: N/A  
U.S. State Regulations  
California Prop 65: N/A  
Other States: N/A

Canada
DSL/NDSL: Not controlled.  
Whmis Classification: Not controlled.

EU
European Inventory of Existing Commercial Chemical Substances (EINECS): The components of this product are on the EINECS inventory or are exempt from inventory.
SECTION XV – REGULATORY INFORMATION (continued)

International Regulations
European/International Regulations: N/A

Chemical safety assessment: No data available

SECTION XVI – OTHER INFORMATION

Date prepared: 2016-02-05

This safety data sheet is intended to provide a brief summary of our knowledge and guidance regarding the use of this material. It is not meant to be an all-inclusive document on worldwide hazard communication regulation. This information is believed to be accurate as of the date issued. Each user of this material needs to evaluate the conditions of use and design the appropriate protective mechanisms to prevent exposures, property damage, or release to the environment. No warranty is expressed or implied with respect to the information herein supplied, and no responsibility for injury to the recipient or third persons, or for any damage to any property is assumed.