

Safety Data Sheet
acc. to OSHA HCS

Printing Date 10/07/2016

Revision Number 2

Revision Date 10/07/2016

1 Identification

- **Product identifier**
- **Trade name:** 52223 (Kalex 52223 Part B)
- **Article number:** 52223
- **Relevant identified uses of the substance or mixture.** Adhesive
- **Application of the substance / the mixture** Adhesive
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Royal Adhesives And Sealants, LLC
2001 W. Washington Street
South Bend IN 46628-2023
Information Phone Number: 574-246-5000
- **Information department:** Environment protection department.
- **Emergency telephone number:**
ChemTrec: Day or Night within USA and Canada: 1-800-424-9300.
Outside USA and Canada: +1 703-527-3887 (collect calls accepted)

2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS08 Health hazard

STOT RE 1 H372 Causes damage to organs through prolonged or repeated exposure.



GHS05 Corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Skin Irrit. 2 H315 Causes skin irritation.

Skin Sens. 1 H317 May cause an allergic skin reaction.

STOT SE 3 H335 May cause respiratory irritation.

- **Label elements**

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

- **Hazard pictograms**



GHS05



GHS07



GHS08

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- **Signal word** *Danger*
- **Hazard statements**
 - Harmful if swallowed.*
 - Causes skin irritation.*
 - Causes serious eye damage.*
 - May cause an allergic skin reaction.*
 - May cause respiratory irritation.*
 - Causes damage to organs through prolonged or repeated exposure.*
- **Precautionary statements**
 - Do not breathe dust/fume/gas/mist/vapors/spray.*
 - Wear protective gloves.*
 - Wear eye protection / face protection.*
 - 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 must not be allowed out of the workplace.*
 - If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.*
 - Immediately call a POISON CENTER/doctor.*
 - Specific treatment (see on this label).*
 - IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.*
 - IF INHALED: Remove person to fresh air and keep comfortable for breathing.*
 - Wash contaminated clothing before reuse.*
 - If skin irritation or rash occurs: Get medical advice/attention.*
 - Get medical advice/attention if you feel unwell.*
 - Rinse mouth.*
 - IF ON SKIN: Wash with plenty of water.*
 - Take off contaminated clothing and wash it before reuse.*
 - Store locked up.*
 - Store in a well-ventilated place. Keep container tightly closed.*
 - Dispose of contents/container in accordance with local/regional/national/international regulations.*

- **Classification system:**

- **NFPA ratings (scale 0 - 4)**



- **HMIS-ratings (scale 0 - 4)**



- **Other hazards**
- **Results of PBT and vPvB assessment**
 - **PBT:** Not applicable.
 - **vPvB:** Not applicable.

* 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**
- **Description: Mixture**

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Hazardous components:

474919-59-0	dicarboxylic acid esters	25-50%
957787-76-7	Polymeric Aliphatic Amine	25-50%

Additional information:

All concentrations are in percent by weight unless the ingredient is a gas. Gas concentrations are in percent by volume. Any pigments or fillers in this product which may be considered "Hazardous" are potentially hazardous only if inhaled as an airborne dust. Exposure by these ingredients as used in sealants, putties, bedding compounds and non-sprayable products is highly unlikely. For the wording of the listed risk phrases refer to section 15.

4 First-aid measures

Description of first aid measures
After inhalation:

Supply fresh air or oxygen; call for doctor.

In case of unconsciousness place patient stably in side position for transportation.

After skin contact:

Wipe excess from skin.

Immediately wash with water and soap and rinse thoroughly.

After eye contact: Rinse opened eye for 20 minutes under running water. Call a Doctor immediately.

After swallowing:

Rinse out mouth with water. Drink 1 - 2 glasses of water but DO NOT induce vomiting. Do not give liquids to a drowsy, convulsing or unconscious person. If vomiting occurs spontaneously, keep head below hips to prevent aspiration.

Seek medical treatment.

Information for doctor:

Most important symptoms and effects, both acute and delayed No further relevant information available.

Indication of any immediate medical attention and special treatment needed

No further relevant information available.

5 Fire-fighting measures

Extinguishing media
Suitable extinguishing agents:

CO₂, extinguishing powder or water spray. Fight larger fires with water spray.

Use fire fighting measures that suit the environment.

Special hazards arising from the substance or mixture No further relevant information available.

Advice for firefighters

Protective equipment: Protective clothing and respiratory protective device.

6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Environmental precautions: Do not allow to enter sewers/ surface or ground water.

Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose of contaminated material as waste in accordance with federal state and local regulations.

Ensure adequate ventilation.

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- **Reference to other sections**
- See Section 7 for information on safe handling.
- See Section 8 for information on personal protection equipment.
- See Section 13 for disposal information.

* 7 Handling and storage

- **Handling:**
- **Precautions for safe handling**
- Avoid prolonged or repeated contact with skin.
- Avoid contact with eyes.
- Wash thoroughly after handling.
- Store in cool, dry place in tightly closed receptacles.
- Prevent formation of aerosols.
- **Information about protection against explosions and fires:** No special measures required.
- **Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:** Store away from oxidizing agents.
- **Further information about storage conditions:**
- Protect from contamination.
- Keep receptacle tightly sealed.
- **Specific end use(s)** No further relevant information available.

* 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data.
- **Control parameters**
- **Components with limit values that require monitoring at the workplace:**
- The Polymeric Aliphatic Amine used in this product has an established New Chemical Exposure Limit (NCEL) of 0.14 mg/m³ as an eight hour time weighted average. Avoid skin contact. avoid breathing substance. avoid ingestion, use respiratory protection, or maintain workplace airborne concentrations at or below the time-weighted average of 0.14 mg/m³. Use skin protection.
- **Additional information:** The lists that were valid during the creation were used as basis.
- **Exposure controls**
- **Personal protective equipment (see listings below)**
- **General protective and hygienic measures:**
- Keep away from foodstuffs, beverages and feed.
- Immediately remove all soiled and contaminated clothing.
- Wash hands before breaks and at the end of work.
- **Breathing equipment:**
- Not necessary if room is well-ventilated.
- Use approved respiratory protection equipment when airborne exposure is excessive. Consult the respirator manufacturer to determine the appropriate type of equipment for a given application. Observe respirator use limitations specified by the manufacturer.
- **Protection of hands:**



Protective gloves

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The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· **Material of gloves**

Chloroprene rubber, CR

Ansell - NEOX Style 9-912 gloves.

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:**



Tightly sealed goggles

Safety glasses with side shields.

· **Body protection:** Protective work clothing

9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Liquid

Color: Black

· **Odor:** Characteristic

· **Odor threshold:** Not determined.

· **pH-value:** Not determined.

· **Change in condition**

Melting point: Undetermined.

· **Boiling point:** > 125 °C (> 257 °F)

· **Flash point:** > 125 °C (> 257 °F)

· **Flammability (solid, gaseous):** Not applicable.

· **Ignition temperature:**

Decomposition temperature: Not determined.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Flammable limits:**

Lower: % by volume = .9

Upper: % by volume = 6.7

· **Vapor pressure:** Not determined.

· **Specific gravity at 20 °C (68 °F):** 0.99 g/cm³ (8.262 lbs/gal)

· **Relative density** Not determined.

· **Vapor density** Not determined.

· **Evaporation rate** Not determined.

· **Solubility in / Miscibility with**

Water: Not miscible or difficult to mix.

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- | |
|---|
| · Partition coefficient (n-octanol/water): Not determined. |
| · Viscosity: |
| Dynamic: Not determined. |
| Kinematic: Not determined. |
| · Solvent content: |
| Organic solvents: 0.0 % |
| VOC (Per EPA 24) not available GMS/L |
| · Other information No further relevant information available. |

* 10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known.
- **Conditions to avoid** Moisture
- **Incompatible materials:** Reacts with strong oxidizing agents.
- **Hazardous decomposition products:** Oxides of carbon and nitrogen.

* 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Skin irritant.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**
The product shows the following dangers according to internally approved calculation methods for preparations:
Irritant
- **Carcinogenic categories**

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)
--

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)
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None of the ingredients is listed.

* 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.
- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.

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- **Additional ecological information:**
- **General notes:** At present there are no ecotoxicological assessments.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

13 Disposal considerations

- **Waste treatment methods**
- **Recommendation:**
Incineration is the preferred method.
Must be specially treated adhering to official regulations.
- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

14 Transport information

- | | |
|---------------------------------------|---|
| · UN-Number | |
| · DOT, IMDG, IATA | UN1760 |
| · UN proper shipping name | |
| · DOT | Corrosive liquids, n.o.s. (Polymeric Aliphatic Amine) |
| · IMDG, IATA | CORROSIVE LIQUID, N.O.S. (Polymeric Aliphatic Amine) |
| · Transport hazard class(es) | |
| · DOT | |
| |  |
| · Class | 8 Corrosive substances |
| · Label | 8 |
| | |
| · IMDG, IATA | |
| |  |
| · Class | 8 Corrosive substances |
| · Label | 8 |
| · Packing group | |
| · DOT, IMDG, IATA | III |
| · Environmental hazards: | Not applicable. |
| · Special precautions for user | Warning: Corrosive substances |
| · Danger code (Kemler): | 80 |
| · EMS Number: | F-A,S-B |

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- **Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code** *Not applicable.*
- **UN "Model Regulation":** *UN1760, Corrosive liquids, n.o.s. (Polymeric Aliphatic Amine), 8, III*

15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Sara**

- **Section 355 (extremely hazardous substances):**

None of the ingredients is listed.

- **Section 313 (Specific toxic chemical listings):**

None of the ingredients is listed.

- **TSCA (Toxic Substances Control Act):**

All components of this product are on the TSCA Inventory or are exempt from TSCA Inventory requirements.

- **Proposition 65**

- **Chemicals known to cause cancer:**

None of the ingredients is listed.

- **(DSL) Canada Domestic Substance List**

All components of this product are on the DSL (Canada Domestic Substance list) or are exempt from DSL requirements.

- **Carcinogenicity categories**

- **EPA (Environmental Protection Agency)**

None of the ingredients is listed.

- **TLV (Threshold Limit Value established by ACGIH)**

None of the ingredients listed.

- **MAK (German Maximum Workplace Concentration)**

None of the ingredients is listed.

- **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

- **National regulations:**

- **Water hazard class:** *Water hazard class 1 (Self-assessment): slightly hazardous for water.*

- **Other regulations, limitations and prohibitive regulations**

The Polymeric Aliphatic Amine used in this product is subject to a TSCA 5(e) consent order and significant new use rule (SNUR) codified at 40 CFR 721.10199.

- **Chemical safety assessment:** *A Chemical Safety Assessment has not been carried out.*

16 Other information

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Although the information and recommendations set forth in this SDS are presented in good faith and are believed to be correct as of the date of this SDS, Royal Adhesives & Sealants makes no representations as to the completeness or accuracy thereof. Information is supplied on the condition that the persons receiving and using it will make their own determination as to the suitability for their purpose prior to use. In no event will Royal Adhesives & Sealants or any affiliate thereof be responsible for damages of any nature whatsoever resulting from the use or reliance on the information set forth in the SDS.

· **Department issuing SDS:** Environment protection department.

· **Creation Date:** 10/07/2016

· **Date of preparation / last revision** 10/07/2016 / 1

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

ACGIH: American Conference of Governmental Industrial Hygienists

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

TLV: Threshold Limit Value

PEL: Permissible Exposure Limit

REL: Recommended Exposure Limit

Acute Tox. 4: Acute toxicity – Category 4

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Skin Sens. 1: Skin sensitisation – Category 1

STOT SE 3: Specific target organ toxicity (single exposure) – Category 3

STOT RE 1: Specific target organ toxicity (repeated exposure) – Category 1