SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

TIP TOP FIXPASTE REMA GOO PART A

Art.-No.

525 3100, 525 3105

1.2. Relevant identified uses of the substance or mixture and uses advised against

Use of the substance/mixture

Conveyor belt repair material

1.3. Details of the supplier of the safety data sheet

Company name:	REMA TIP TOP AG
Street:	Gruber Strasse 63
Place:	D-85586 Poing
Telephone	+49 (0) 8121 / 707 - 0

Verantwortlich für das Sicherheitsdatenblatt: sds@gbk-ingelheim.de

1.4. Emergency telephone number:	INTERNATIONAL: +49 - (0) 6132 - 84463, GBK GmbH (24h - 7d/w - 365d/a) England and Wales: NHS Direct - 0845 4647; Scotland: NHS 24 - 08454 24 24 24

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Indications of danger: T - Toxic, Xn - Harmful, Xi - Irritant
R phrases:
Toxic by inhalation.
Irritating to eyes, respiratory system and skin.
Limited evidence of a carcinogenic effect.
May cause sensitisation by inhalation and skin contact.
Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Hazard categories:
Acute toxicity: Acute Tox. 2
Skin corrosion/irritation: Skin Irrit. 2
Serious eye damage/eye irritation: Eye Irrit. 2
Respiratory/skin sensitization: Resp. Sens. 1
Respiratory/skin sensitization: Skin Sens. 1
Carcinogenicity: Carc. 2
Specific target organ toxicity - single exposure: STOT SE 3
Specific target organ toxicity - repeated exposure: STOT RE 2
Hazard Statements:
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
Fatal if inhaled.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause respiratory irritation.
Suspected of causing cancer.
May cause damage to organs through prolonged or repeated exposure.

2.2. Label elements

Hazardous components which must be listed on the label

Oxirane, methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1), polymer with 4,4'-methylenedicyclohexyl diisocyanate
Dicyclohexylmethane-4,4'-di-isocyanate
Diphenylmethane-4,4'-diisocyanate
triethoxy(3-isocyanatopropyl)silane

Signal word: Danger

Pictograms: GHS06-GHS08

Hazard statements

H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled .
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.

Precautionary statements

P202	Do not handle until all safety precautions have been read and understood.
P260	Do not breathe vapour.
P280	Wear protective gloves/protective clothing/eye protection/face protection.
P302+P352	IF ON SKIN: Wash with plenty of water.
P304+P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P308+P313	IF exposed or concerned: Get medical advice/attention.
P405	Store locked up.

Special labelling of certain mixtures

EUH204	Contains isocyanates. May produce an allergic reaction.

2.3. Other hazards

Not known.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical characterization

Preparation with isocyanates

Hazardous components

EC No	Chemical name	Quantity
CAS No	Classification according to Directive 67/548/EEC	
Index No	Classification according to Regulation (EC) No. 1272/2008 [CLP]	
REACH No		
	Oxirane, methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1), polymer with 4,4'-methylenedicyclohexyl diisocyanate	45 - 60 %
67837-35-8	T - Toxic, Xi - Irritant R23-36/37/38-42/43	
	Acute Tox. 3, Skin Irrit. 2, Eye Irrit. 2, Resp. Sens. 1, Skin Sens. 1, STOT SE 3; H331 H315 H319 H334 H317 H335	
225-863-2	Dicyclohexylmethane-4,4'-di-isocyanate	25 - 40 %
5124-30-1	T - Toxic, Xi - Irritant R23-36/37/38-42/43	
615-009-00-0	Acute Tox. 2, Skin Irrit. 2, Eye Irrit. 2, Resp. Sens. 1, Skin Sens. 1, STOT SE 3; H330 H315 H319 H334 H317 H335	
01-2119457437-31		
202-966-0	Diphenylmethane-4,4'-diisocyanate	5 - 10 %
101-68-8	Carc. Cat. 3, Xn - Harmful, Xi - Irritant R40-20-48/20-36/37/38-42/43	
615-005-00-9	Carc. 2, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Resp. Sens. 1, Skin Sens. 1, STOT SE 3, STOT RE 2; H351 H332 H315 H319 H334 H317 H335 H373	
01-2119457014-47		
246-467-6	triethoxy(3-isocyanatopropyl)silane	1 - 5 %
24801-88-5	T+ - Very toxic, Xn - Harmful, Xi - Irritant R21/22-26-36/37/38-42	
	Acute Tox. 2, Acute Tox. 4, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Resp. Sens. 1, STOT SE 3; H330 H302 H312 H315 H319 H334 H335	

Full text of R-, H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information
Remove contaminated soaked clothing immediately.
In the event of persistent symptoms receive medical treatment.
Take away from danger area and lay down affected person.

After inhalation
Move to fresh air in case of accidental inhalation of vapours.
If patient is not breathing, apply artificial respiration.
Refer for medical treatment.

After contact with skin
Wash contaminated skin with plenty of water and soap or with liquid polyethylene glycol.
Consult a doctor if skin irritation persists.

After contact with eyes
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.
Seek medical treatment by eye specialist.

After ingestion
Do not induce vomiting.
Rinse out mouth thoroughly with water.
Summon a doctor immediately.
Induce vomiting only upon the advice of a physician.

4.2. Most important symptoms and effects, both acute and delayed

Fatal if inhaled.
Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause respiratory irritation.

Suspected of causing cancer.
May cause damage to organs through prolonged or repeated exposure.

4.3. Indication of any immediate medical attention and special treatment needed
Treat symptoms.
Keep under medical supervision for at least 48 hours.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media
Alcohol-resistant foam, dry chemical, carbon dioxide (CO2), water-spray.

Unsuitable extinguishing media
Full water jet.

5.2. Special hazards arising from the substance or mixture
Fire may produce:
Carbon monoxide (CO), carbon dioxide (CO2) and nitrogen oxides (NOx).
Hydrogen cyanide (HCN)

5.3. Advice for firefighters
Wear self-contained breathing apparatus and protective suit.

Additional information
Cool containers at risk with water spray jet.
Do not release chemically contaminated water into drains, soil or surface waters. Sufficient measures must be taken to retain water used for extinguishing.
Fire residues and contaminated firefighting water must be disposed of in accordance with the local regulations.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
In case of vapour formation use respirator.
Ensure adequate ventilation.
Remove persons to safety.
Use personal protective clothing.

6.2. Environmental precautions
Do not discharge into the drains/surface waters/ground water.
Do not discharge into the subsoil/soil.

6.3. Methods and material for containment and cleaning up
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder).
Shovel into suitable container for disposal.
Container should not be gas-tight closed.
Container can be pressurized by carbon dioxide due to reaction with humid air and/or water.

6.4. Reference to other sections
Observe protective instructions (see Sections 7 and 8).
Information for disposal see section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling
Keep container tightly closed.
Vapours are heavier than air and spread along ground.
Avoid contact with the skin and the eyes.
Do not breathe vapours.
Local exhaust.
Use only in thoroughly ventilated areas.

Advice on protection against fire and explosion
Keep away from heat and sources of ignition.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels
Keep containers tightly closed in a cool, well-ventilated place.
Store only in original container at temperature of 30°C maximum (=86°F).
Container can be pressurized by carbon dioxide due to reaction with humid air and/or water.

Advice on storage compatibility
Exothermic reaction with:
Acids and bases.
Water, amines, alcohols

Further information on storage conditions
Keep away from food, drink and animal feeding stuffs.
Container can be pressurized by carbon dioxide due to reaction with humid air and/or water.

7.3. Specific end use(s)

Conveyor belt repair material

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

8.2. Exposure controls

Appropriate engineering controls
Ensure adequate ventilation, especially in confined areas.

Protective and hygiene measures
Do not inhale vapours.
Avoid contact with eyes and skin.
Wash hands before breaks and immediately after handling the product.
When using do not eat, drink or smoke.
Take off immediately all contaminated clothing.

Eye/face protection
Tightly fitting goggles (EN 166).
Eye wash bottle with pure water (EN 15154).

Hand protection
Splash protection:
Protective gloves resistant to chemicals made of nitrile, minimum coat thickness 0.4 mm, permeation resistance (wear duration) approx. 480 minutes, i.e. protective glove <Camatril Velours 730> made by www.kcl.de.
This recommendation refers exclusively to the chemical compatibility and the lab test conforming to EN 374 carried out under lab conditions.
Requirements can vary as a function of the use. Therefore it is necessary to adhere additionally to the recommendations given by the manufacturer of protective gloves.

Skin protection
Long sleeved clothing (EN 368).
Single-use coverall

Respiratory protection
In case of insufficient ventilation wear suitable respiratory equipment (gas filter type A) (EN 14387).

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state:	Liquid - viscous	
Colour:	Black	
Odour:	Soft	
Initial boiling point and boiling range:	> 200 °C	
Pourpoint:		
Flash point:	> 130 °C	Closed cup
Lower explosion limits:	n.d.	
Upper explosion limits:		

Vapour pressure: (at 25 °C)	n.d.
Vapour pressure: (at 50 °C)	20 hPa
Density (at 25 °C):	1,1 g/cm³
Water solubility: (at 20 °C)	Reacts with water.

9.2. Other information

No data available.

SECTION 10: Stability and reactivity

10.1. Reactivity

No decomposition if stored and applied as directed.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

Reactions with strong acids and alkalies.
Reacts with: Water, amines, alcohols

10.4. Conditions to avoid

To avoid thermal decomposition, do not overheat.
Container can be pressurized by carbon dioxide due to reaction with humid air and/or water.

10.5. Incompatible materials

Acids and bases.
Water, amines, alcohols

10.6. Hazardous decomposition products

Hydrogen cyanide gas., Carbon monoxide (CO), carbon dioxide (CO2) and nitrogen oxides (NOx).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity
Fatal if inhaled.
No toxicological data available.
ATEmix/oral: > 5000 mg/kg
ATEmix/dermal: > 2000 mg/kg
ATEmix/inhalation: < 0,5 mg/l

Irritation and corrosivity
Causes skin irritation.
Causes serious eye irritation.

Sensitising effects
May cause an allergic skin reaction. (Oxirane, methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1), polymer with 4,4'-methylenedicyclohexyl diisocyanate), (Dicyclohexylmethane-4,4'-di-isocyanate), (Diphenylmethane-4,4'-diisocyanate)
May cause allergy or asthma symptoms or breathing difficulties if inhaled. (Oxirane, methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1), polymer with 4,4'-methylenedicyclohexyl diisocyanate), (Dicyclohexylmethane-4,4'-di-isocyanate), (Diphenylmethane-4,4'-diisocyanate), (triethoxy(3-isocyanatopropyl)silane)

STOT-single exposure
May cause respiratory irritation. (Oxirane, methyl-, polymer with oxirane, ether with 1,2,3-propanetriol (3:1), polymer with 4,4'-methylenedicyclohexyl diisocyanate), (Dicyclohexylmethane-4,4'-di-isocyanate), (Diphenylmethane-4,4'-diisocyanate), (triethoxy(3-isocyanatopropyl)silane)

Severe effects after repeated or prolonged exposure
May cause damage to organs through prolonged or repeated exposure. (Diphenylmethane-4,4'-diisocyanate)

Carcinogenic/mutagenic/toxic effects for reproduction
Suspected of causing cancer. (Diphenylmethane-4,4'-diisocyanate)

Aspiration hazard
Based on available data, the classification criteria are not met.

Additional information on tests
Classification in compliance with the assessment procedure specified in the Regulation (EC) no 1272/2008.

Practical experience

Other observations
With hypersensitive people, reactions as cough or difficulty of breathing may appear even with tiny concentrations of isocyanates; therefore keep room aerated and ventilated.
Repeated or prolonged exposure may cause skin irritation and dermatitis, due to degreasing properties of the product.

SECTION 12: Ecological information

12.1. Toxicity
Ecological data are not available.

12.2. Persistence and degradability
Not readily biodegradable.

12.3. Bioaccumulative potential
No data available.

12.4. Mobility in soil
No data available.

12.5. Results of PBT and vPvB assessment
According to Regulation (EC) No 1907/2006 (REACH) none of the substances, contained in this product are a PBT / vPvB substance.

12.6. Other adverse effects
Low hazard to waters.

Further information
In aqueous systems, formation of unsoluble and chemically inert (inactive) polyureas.
Do not flush into surface water or sanitary sewer system.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal
Where possible recycling is preferred to disposal.
Can be incinerated, when in compliance with local regulations.

Waste disposal number of waste from residues/unused products

080409	WASTES FROM THE MANUFACTURE, FORMULATION, SUPPLY AND USE (MFSU) OF COATINGS (PAINTS, VARNISHES AND VITREOUS ENAMELS), ADHESIVES, SEALANTS AND PRINTING INKS; wastes from MFSU of adhesives and sealants (including waterproofing products); waste adhesives and sealants containing organic solvents or other dangerous substances Classified as hazardous waste.

Contaminated packaging
Empty containers should be taken for local recycling, recovery or waste disposal.
Contaminated packagings are to be treated like the product itself.
Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:	UN 2206
14.2. UN proper shipping name:	ISOCYANATE SOLUTION, TOXIC, N.O.S. (Dicyclohexylmethane-4,4'-di-isocyanate, triethoxy(3-isocyanatopropyl)silane)
14.3. Transport hazard class(es):	6.1
14.4. Packing group:	II
Hazard label:	6.1

Classification code:	T1
Limited quantity:	100 mL / 30 kg
Transport category:	2
Hazard No:	60
Tunnel restriction code:	D/E

Inland waterways transport (ADN)

14.1. UN number:	UN 2206
14.2. UN proper shipping name:	ISOCYANATE SOLUTION, TOXIC, N.O.S. (Dicyclohexylmethane-4,4'-di-isocyanate, triethoxy(3-isocyanatopropyl)silane)
14.3. Transport hazard class(es):	6.1
14.4. Packing group:	II
Hazard label:	6.1

Classification code:	T1
Limited quantity:	100 mL / 30 kg

Marine transport (IMDG)

14.1. UN number:	UN 2206
14.2. UN proper shipping name:	ISOCYANATE SOLUTION, TOXIC, N.O.S. (Dicyclohexylmethane-4,4'-di-isocyanate, triethoxy(3-isocyanatopropyl)silane)
14.3. Transport hazard class(es):	6.1
14.4. Packing group:	II
Hazard label:	6.1

Marine pollutant:	No
Limited quantity:	100 mL / 30 kg
EmS:	F-A, S-A

Air transport (ICAO)

14.1. UN number:	UN 2206
14.2. UN proper shipping name:	ISOCYANATE SOLUTION, TOXIC, N.O.S. (Dicyclohexylmethane-4,4'-di-isocyanate, triethoxy(3-isocyanatopropyl)silane)
14.3. Transport hazard class(es):	6.1
14.4. Packing group:	II
Hazard label:	6.1

Limited quantity Passenger:	Y641 / 1 L
IATA-packing instructions - Passenger:	654
IATA-max. quantity - Passenger:	5 L
IATA-packing instructions - Cargo:	662
IATA-max. quantity - Cargo:	60 L

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

14.6. Special precautions for user

Take the usual precautions when handling with chemicals.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

The transport takes place only in approved and appropriate packaging.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

EU regulatory information

1999/13/EC (VOC): 0 %

National regulatory information

Employment restrictions: Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing.

Additional information

Chemical prohibition regulation consider.

15.2. Chemical safety assessment

For this substance a chemical safety assessment has not been carried out.

SECTION 16: Other information

Abbreviations and acronyms

ADR = Accord européen relatif au transport international des marchandises Dangereuses par Route
RID = Règlement concernant le transport international ferroviaire de marchandises dangereuses
ADN = Accord européen relatif au transport international des marchandises dangereuses par voie de navigation intérieure
IMDG = International Maritime Code for Dangerous Goods
IATA/ICAO = International Air Transport Association / International Civil Aviation Organization
MARPOL = International Convention for the Prevention of Pollution from Ships
IBC-Code = International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
REACH = Registration, Evaluation, Authorization and Restriction of Chemicals
CAS = Chemical Abstract Service
EN = European norm
ISO = International Organization for Standardization
DIN = Deutsche Industrie Norm
PBT = Persistent Bioaccumulative and Toxic

LD = Lethal dose
LC = Lethal concentration
EC = Effect concentration
IC = Median immobilisation concentration or median inhibitory concentration

Relevant R-phrases (Number and full text)

20	Harmful by inhalation.
21/22	Harmful in contact with skin and if swallowed.
23	Toxic by inhalation.
26	Very toxic by inhalation.
36/37/38	Irritating to eyes, respiratory system and skin.
40	Limited evidence of a carcinogenic effect.
42	May cause sensitisation by inhalation.
42/43	May cause sensitisation by inhalation and skin contact.
48/20	Harmful: danger of serious damage to health by prolonged exposure through inhalation.

Relevant H- and EUH-phrases (Number and full text)

H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.

H319	Causes serious eye irritation.
H330	Fatal if inhaled.
H331	Toxic if inhaled.
H332	Harmful if inhaled.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled .
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.
EUH204	Contains isocyanates. May produce an allergic reaction.

Further Information

Data of items 4 to 8, as well as 10 to 12, do partly not refer to the use and the regular employing of the product (in this sense consult information on use and on product), but to liberation of major amounts in case of accidents and irregularities.
The information describes exclusively the safety requirements for the product(s) and is based on the present level of our knowledge.
The delivery specifications are contained in the corresponding product sheet.
This data does not constitute a guarantee for the characteristics of the product(s) as defined by the legal warranty regulations.
(n.a. = not applicable; n.d. = not determined)

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)