

HEALTH AND SAFETY INFORMATION
Ronabond PGC Part A & B**1. COMPOSITION**

Hazardous substances present on their own (present in the preparation at a sufficient concentration to give it the toxicological characteristics it would have in a 100% pure state) INDEX INF - 0004 ISOCYANATES: PREPOLYMER (OR ADDUCT) BASE FROM HDI concentration $\geq 10.00\%$ and $<25.00\%$.
Symbol: Xn R: 42/43

Other substances representing a hazard:
INDEX 607 195-00-7 CAS 108-65-6 CE 203-603-9 2- METHOXY-1-METHYLETHYL ACETATE concentration $>-50.00\%$ and $<100.00\%$. Symbol: Xi R. 10-36

Substances present at a concentration below the minimum danger threshold.
INDEX 615-011-00-1 CAS 822-06-0 CE 212-485-8 HEXAMETHYLENE-DI-ISOCYANATE concentration $\geq 0.00\%$ and $<2.50\%$. Symbol: T R: 23-36/37/38-42/43

Other substances with occupational exposure limits:
No known substance in this category present.

Other components:
649_356_00_4 CAS 64742-95-6 CE 265-199-0 SOLVANT NAPHTE AROMATIQUE LEGER (PETROLE)* concentration $\geq 0.00\%$ and $<2.50\%$. Symbol: Xn N R: 65 66 51/53

2. HAZARDS IDENTIFICATION

This product is classed: Flammable
Possibility of irritation to the eyes.
The preparation causes sensitisation of the skin and respiratory organs. It also irritates the skin and prolonged contact may aggravate this effect.

3. FIRST AID MEASURES

As a general rule, in case of doubt or if symptoms persist, always call a doctor.
NEVER induce swallowing in an unconscious person.
In the event of exposure by inhalation
In the event of dust formed by mechanical action (sanding, sawing, etc...), this dust may cause irritation by inhalation and contact with eyes.
If a large quantity is inhaled, move the patient into the fresh air and keep him/her warm and still.
If breathing is irregular or has stopped, effect mouth-to-mouth resuscitation and call a doctor.
Do not give the patient anything orally.
In the event of splashes or contact with eyes
Wash thoroughly with soft, clean water for 15 minutes holding the eyelids open. Refer the patient to an ophthalmologist, in particular if there is any redness, pain or visual impairment.
Regardless of the initial state, refer the patient to an ophthalmologist and show him the label.
In the event of splashes or contact with skin

Remove contaminated clothing and wash the skin thoroughly with soap and water or a recognised cleaner. DO NOT use solvents or thinners.

In the event of swallowing

Call a doctor immediately and show him the label.

4. FIRE FIGHTING MEASURES

Chemical powders, Carbon dioxide and other extinguishing gas are suitable for small fires.

In the event of fire, the recommended extinguishing agents are:

In the event of fire, use specifically suitable extinguishing agents. Never use water.

Extinguishing agents not to be used

Do not breathe in smoke.

Prevent the effluent of fire-fighting measures from entering drains or waterways.

Special equipment for fire-fighting personnel.

Fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

Due to the toxicity of the gas emitted on thermal decomposition of the products, fire-fighting personnel are to be equipped with autonomous insulating breathing apparatus.

5. ACCIDENTAL RELEASE MEASURES

Safety precautions:

Eliminate any possible source of ignition and ventilate the premises.

On account of the organic solvents contained in the preparation, eliminate sources of ignition and ventilate the premises.

Avoid inhaling the fumes.

Avoid any contact with the skin and eyes.

Consult the safety measures listed under headings 7 and 8.

Environmental safety precautions:

Contain and control the leaks or spills with non-combustible absorbent materials such as sand, carth, vermiculite, dialorn carth in drums for waste disposal.

Prevent any material from entering drains or waterways.

Use drums to dispose of waste recovered in accordance with applicable regulations (see heading 13)

If the product contaminates waterways, rivers or drains, alert the relevant authorities in accordance with statutory procedures.

Cleaning methods:

Clean preferably with a detergent, do not use solvents.

Contaminated areas must be cleaned very quickly.

A possible decontaminant for flammable products may be: (expressed by volume) water (45 parts). Ethanol or isopropanol (50 parts). Concentrated ammonia (d-0.880) (5 parts). For non-flammable products. Sodium carbonate (5 parts). Water (95 parts).

These residues must be stored for disposal in accordance with applicable regulations (see 13).

6. HANDLING AND STORAGE

The regulations relating to storage premises apply to workshops where the product is handled.

Anyone with the history of asthma, allergies, chronic or periodic respiratory problems must on no account use these preparations. Anyone with a history of skin sensitisation must on no account handle such products.

Handling

Handle in well-ventilated areas.

The fumes are denser than air. They can spread along the ground and form explosive mixtures with air. Prevent the formation of flammable or explosive concentrations in air and avoid vapour concentrations higher than the occupational exposure limits.

Fire prevention:

Prevent the accumulation of electrostatic charges with connections to earth.

The preparation may become electrostatically charged; always place on the ground during transfer. Wear antistatic shoes and clothes and make floors of conductive materials.

Use the product in premises where there are no naked flames or other sources of ignition and have protected electrical equipment.

Do not use tools which may produce sparks. Do not smoke.

Prevent access by unauthorised personnel.

Recommended equipment and procedures

For personal safety, see 8.

Observe precautions stated on label and also industrial safety regulations

Packages which have been opened must be re-closed carefully and stored in an upright position

Avoid inhaling fumes.

Avoid contact of product with the eyes

Prohibited equipment and procedures.

Smoking, eating and drinking are prohibited in premises where the preparation is used

Never open the packages under pressure.

Storage

Keep the container tightly closed in a dry place.

Keep away from all sources of ignition – do not smoke.

Keep well away from all sources of ignition, heat and direct sunlight.

The floor must be impermeable and form collecting basin so that, in the event of an accidental spillage, the liquid cannot spread beyond this area.

7. EXPOSURE CONTROLS/PERSONAL PROTECTION

Anyone with a history of skin sensitisation, asthma, allergies, chronic, periodic respiratory problems must on no account use these preparations.

Technical measures.

In the event of dust formed by mechanical action (sanding, sawing, etc...), this dust must cause irritation by inhalation and contact with eyes.

Ensure adequate ventilation, if possible with extractor fans at work posts and appropriate general extraction.

If this ventilation is insufficient to maintain the concentration of particles and dust below the exposure limits, wear breathing apparatus.

Avoid inhaling dust.

If this ventilation is insufficient to maintain the concentration of solvent fumes below the exposure limits, wear breathing apparatus.

Exposure limits per INRS ND 2098-174-99 AND ND 2114-176-99:

	VME-ppm	VME-mg/m ³	VME-ppm	VLE-mg/m ³	Notes	TMP
France						
822-06-0	0,01	0,075	0,02	0,15	AR	62
108-65-6	-	-	-	-	-	-
Germany	Class	MAK-ppm	MAK-mg/m ³	Notes	Notes	
822-06-0	1	0,005	0,035	Sens		
108-65-6	1	50	270	C		
ACGIH(TI.V)	TWA-ppm	TWA-mg/m ³	STEL-ppm	STEL-mg/m ³	Notes	Notes
822-06-0	0,005	0,034	-	-	-	-
108-65-6	-	-	-	-	-	-

Exposure limits per 2000/39/EC and 98/24/EC:

EC	VME-ppm	VME-mg/m3	VLE-ppm	VLE-mg/m3	Notes
108-65-6	50	275	100	550	Pea

Safety breathing apparatus:

Where workers encounter concentrations higher than the exposure limits, they must wear suitable, approved masks.

Hand protection

Protective creams may be used for exposed skin, but they should not be applied after contact with the product.

Eye and face protection

Avoid contact with eyes

Wear safety goggles

Provide eye washes in workshops where the product is constantly handled

Skin protection

Wear antistatic clothing made of natural fibre or synthetic fibre resistance to high temperatures.

After contact with the product, any contaminated part of the body shall be washed.

For further information see 11 of S.D.S – Toxicological information.

8. PHYSICAL AND CHEMICAL PROPERTIES

Density	>1
Acid/base character of preparation	not relevant
Solubility of preparation in water	insoluble
Vapour tension at 50°C of volatile constituents	Below 110 kpa (1.10 bar)
Physical state	fluid liquid
Flash point interval	23°C < Flash point > - 55°C
The PH is impossible to measure or its value is	not relevant
Self-ignition temperature	not specified
Decomposition temperature	not specified
Melting temperature interval	not specified
Average distillation temperature of solvents contained	not specified
Flash point	42.00 °C

9. STABILITY AND REACTIVITY

When exposed to high temperatures, the preparation may release dangerous decomposition products such as carbon monoxide and dioxide, smoke and nitrogen oxide

It may also release hydrogen cyanide, amines and alcohols

Keep away from oxidising agents and strongly acidic or basic materials to avoid exothermic reactions

Exothermic reactions occur with amines and alcohols. The preparations react slowly with water and give off carbonic gas which may produce pressure increases in closed packages.

10. TOXICOLOGICAL INFORMATION

No data is available regarding the preparation itself.

Exposure to fumes from solvents contained in the preparation beyond the exposure limits stated may produce effects harmful to health, such as.

Irritation of mucous membrane and respiratory system, kidneys, liver and central nervous system.

Symptoms produced will include headaches, numbness, dizziness, fatigue, muscular asthenia and, in extreme cases, loss of consciousness.

Prolonged or repeated contact with the preparation may strip the skin of its natural oil and thus cause non-allergic dermatitis on contact and absorption through the epidermis. Splashes in the eyes may cause irritation and reversible damage

It is generally agreed that substances contained are likely to cause, when applied to the eye of an animal, the appearance of major lesions which persist for at least twenty-four hours.

It is generally agreed that substances contained are likely to cause, among certain predisposed subjects, a sensitisation reaction in the event of inhalation and exposure to the skin.

Based on the properties of isocyanates and taking into account toxicological data for similar preparations, this preparation may cause irritation and/or sensitisation of the respiratory system.

It may also lead to asthma, respiratory problems and angina.

Those susceptible may display asthmatic symptoms when exposed to atmospheres with an Isocyanate concentration well below those of the VLE exposure limits.

Repeated exposure may cause permanent respiratory problems.

In the event of dust formed by mechanical action (sanding, sawing, etc...) this dust may cause irritation by inhalation and contact with eyes.

11 ECOLOGICAL INFORMATION

No ecological data on the product itself is available.

The product must not be allowed to run into drains or waterways.

If the product contaminates waterways, rivers or drains, alert the relevant authorities in accordance with statutory procedures.

12 DISPOSAL CONSIDERATIONS

Do not pour into drains or waterways.

Conform to local regulations about water protection

Wastes and used packages must be treated in specialized centres

13 TRANSPORT INFORMATION

Transport product in compliance with provisions of the ADR for road, RID for rail, IMDG for sea and ICAO/IATA for air transport UN 1263=PAINT RELATED MATERIAL (including paint thinning or reducing compound)

ADR/RID	Class	Code	Pack gr	Label	Ident	LQ	Provis		
	3	F1	III		3	30	LQ7	163-640E	
Not subject to this regulation if Q<4501.									
IMDG	Class	2°Label	Pack gr.		LQ	EMS	Provis		
	3	-	III			51	F-E,S-E	163 223 944 955	
Not subject to this regulation if Q<301									
IATA	Class	2° Label	Pack gr.		Passenger	Passenger	Cargo	Cargo	note
	3	-	III		309	60L	310	220 L	A3, A72
	3	-	III		Y309	10 L	-		

14. REGULATORY INFORMATION

This preparation was classified in compliance with the directive known as < ALL preparations > 1999/45/EC (Hazardous substances) have been taken into account.

Contains compounds with an Isocyanate base – refer to the information supplied by the manufacturer. This information is found on this safety data sheet.

Preparation classification
 Harmful Flammable

Contains:
 INF-0004 ISOCYANATES PREPOLYMER (OR ADDUCT) BASE FROM HDI
 Particular hazards associated with the preparation and safety recommendations:

R 42/43	May cause sensitisation by inhalation and skin contact.
R 36	Irritating to eyes
R 10	Flammable
	Contains isocyanates. See information supplied by the manufacturer.
S 23	Do not breathe vapour and spray
S 24	Avoid contact with skin
S 37	Wear suitable gloves
S 45	In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
S 26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S 38	In case of insufficient ventilation, wear suitable respiratory equipment.
S 62	If swallowed, do not induce vomiting seek medical advice immediately and show this container or label.
S 29/56	Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.

15. OTHER INFORMATION

Since the user's working conditions are not known by us, the information supplied on this safety data sheet is based on our current level of knowledge and on national and community regulations.

The product must not be used for any purpose other than those specified under heading 1 without first obtaining written handling instructions.

It is at all times the responsibility of the user to take all necessary measures to comply with legal requirements and local regulations.

The information given on this safety data sheet must be regarded as a description of the safety requirements relating to our product and not a guarantee of its properties.

The complete sentence with numbers listed in chapter 2.

R 10	Flammable
R 23	Toxic by inhalation
R 36	Irritating to eyes
R 36/37/38	Irritating to eyes, respiratory system and skin.
R 42/43	May cause sensitisation par inhalation and skin contact.
R 65	Harmful may cause lung damage if swallowed.
R 66	Repeated exposure may cause skin dryness or cracking.