

Manufacturers and Distributors of Top Quality Paints and Solvents

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**B&R RETARDER THINNERS
 SPECIFICATION SHEET AND
 MATERIAL SAFETY DATA SHEET**

Trade / Commercial Name	Retarder Thinners
Synonyms	Cellulose / Duco Thinners
Chemical formula	Formulated chemical
Chemical family	Hydrocarbon solvent, alcohols and ketones
Un No	1268
ERG No	153
Hazchem Code	2x
EAC	60
Hazardous Components	Hydrocarbon Solvents and Ketones

PHYSICAL PROPERTIES

PROPERTIES	UNITS	TYPICAL VALUES
Boiling Point – 760mm HG	Deg. Celsius	65 – 90 °C
Melting Point (pour pt)	Deg. Celsius	Less than –40 °C
Vapour pressure (at 40 °C)		2 – 400 mm
Vapour density (Air = 1)		2
Distillation Range (IBP °C)		10 = 65 20 = 70 50 = 95 90 = 135 FBP = 150
Density at 20°C	Kg/l	0,810
Residue on evaporation (100ml)	Mg/kg	Less than 0,01
Flash point	Deg. Celsius	Less than -5 °C
Colour	Saybolt	+30
Contents	-	Alcohols, Ketones, Acetates and Aromatics
Solvent type	% v/v	Active 24 ; Latent 13 ; Diluent 63

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Retarder Thinners cont/...

HAZARDOUS COMPONENTS

<u>COMPONENTS</u>	<u>HAZARD DATA</u>
Various alcohols	TLV = 200 – 1000 ppm
Various ketones	TLV = 750 – 2000 ppm
Various acetones	TLV = 150 – 400 ppm
Various hydrocarbons	TLV = 400 – 1000 ppm

SPECIAL PROTECTION DATA

Ventilation requirements	Area must be well ventilated
Respiratory (in detail)	Air supplied respirator for high concentrations
Eyes	Safety goggles
Gloves	Rubber gloves

FIRE AND EXPLOSION DATA

Flash point (test method)	0 – 20 degrees C (closed cup)
Auto ignition	400 – 440 degrees C
Flammable limits in air & by volume	Lower: 1,8% Upper: 12,8%
Extinguishing media	Alcohol foam, CO2, dry chemical
Special fire fighting procedures	Avoid using water as extinguishing media as it spreads the flame
Unusual fire and explosion hazards	None

SPILL OR LEAK PROCEDURES

Steps to be taken if material is released or spilled	Not pertinent
Neutralizing chemicals waste disposal method	Mop up with plenty of water and run to waste, diluting greatly with running water. Ventilate area well to evaporate remaining liquid and disperse vapour

HEALTH HAZARD INFORMATION

Emergency overview: clear liquid corrosive to skin and mucous membranes
 Medical conditions aggravated by exposure: dermatitis, existing respiratory disease
 and existing liver and kidney disease.

Causes	Symptoms	Emergency and first aid procedures
Inhalation (Breathing)	High vapour concentrations may be irritating to the eyes, nose and respiratory tract. May cause headaches, dizziness and nausea. Use with adequate ventilation. Repeated inhalation may cause lung damage. Irritating to mucous membranes and acts as an anaesthetic in very high concentrations.	If patient is overcome, remove to fresh air and call a physician. Administer artificial respiration if breathing is irregular or has stopped. Note : do not use mouth to mouth. Use a pocket mask with a one way valve.
Skin Contact / Absorption	May cause skin irritation and/or dermatitis. Prolonged excessive contact causes defatting and drying out of the skin.	Remove and isolate contaminated clothing and shoes. Avoid spreading material on unaffected skin. Wash well with soap and water. Keep warm and quiet.

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Causes	Symptoms	Emergency and first aid procedures
Eye Contact	Contact will cause irritation and/or burns. Irritation to eye caused at concentrations greater than 500 ppm.	Flush thoroughly with water for at least 15 minutes, within 1 minute of contact. Hold eyelids open while washing. In severe cases, obtain medical attention.
Ingestion (Swallow)	May cause pulmonary damage or chemical pneumonitis, if aspirated into the lungs. Toxic if swallowed.	If victim is still conscious and not having convulsions, induce vomiting and obtain medical attention promptly. Administer vegetable oil.
Carcinogenicity	NTP – not listed IARC – not listed OSHA – not listed	
Acute over-exposure	If present in high concentrations, vapours cause moderate irritation of eyes and respiratory systems. Effect is temporary.	

FIRE FIGHTING MEASURES

Carbon dioxide, foam and dry chemical.

Fire involving Tanks or Bulk Containers: Fight fire from maximum distance or use unmanned hose holders or monitor nozzles. Do not get water inside containers. ALWAYS stay away from the ends of tanks.

Cool containers with flooding quantities of water until well after fire is out.

Withdraw immediately in case of rising sound from venting safety devices or discoloration of tank.

Isolate spill or leak area immediately for at least 25 to 50 metres (80 to 160 feet) in all directions.

Keep unauthorized personnel away. Stay upwind. Keep out of low areas. Ventilate enclosed areas.

Wear positive pressure self-contained breathing apparatus (SCBA).

Wear chemical protective clothing, which is specifically recommended by the manufacturer.

Structural firefighters' protective clothing is recommended for fire situations ONLY; it is not effective in spill situations.

If ROAD OR RAIL TANKER is involved in a fire, ISOLATE for 800 metres (1/2 mile) in all directions, also, consider initial evacuation for 800 metres (1/2 mile) in all directions.

HANDLING AND STORAGE

Store between 0 and 28°C.

Keep out of direct sunlight.

Empty containers may retain hazardous residue and explosive vapours.

Keep away from heat, sparks or flame.

Do not cut, puncture, or weld on or near this container.

Follow label warnings until container is thoroughly cleaned or destroyed.

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Retarder thinners cont/...

ACCIDENTAL RELEASE MEASURES**PRECAUTIONS:**

Absorb with fire retardent treated sawdust, diatomaceous earth etc. Shovel up and dispose at an appropriate waste disposal facility.

Restrict access to area.

Provide adequate protective equipment and ventilation.

Remove sources of heat and flame.

Notify occupational and environmental authorities.

SPILL OR LEAK:

ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).

Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Stop leak if you can do it without risk.

Prevent entry into waterways, sewers, basements or confined areas.

Absorb or cover with dry earth, sand or other non-combustible material and transfer to containers.

DO NOT GET WATER INSIDE CONTAINERS

EXPOSURE CONTROLS / PERSONAL PROTECTION**Occupational Exposure Limits
Controls****NO EXPOSURE LIMITS ESTABLISHED**

The control measures appropriate for a particular worksite depend on how this material is used and on the extent of exposure. The best protection is to enclose operations and/or provide local exhaust ventilation at the site of chemical release. Use a non-sparking, grounded ventilation system separate from other exhaust ventilation systems. Exhaust directly to the outside. Supply sufficient replacement air to make up for air removed. Have a safety shower/eye wash fountain readily available in the immediate work area.

Personal Protection

If engineering controls and work practices are not effective in controlling this material, then wear suitable personal protection equipment, including chemical safety goggles & face shield, boots, imperious gloves, coveralls, & respiratory protection. Have appropriate equipment available for use in emergencies.

PHYSICAL AND CHEMICAL PROPERTIES

Clear liquid.

Specific gravity (20°C) 0.816

Solubility in water Not soluble

Flash point °C (TCC) <10

Solvent type, % Active 15.7

Latent 12.3

Dilvent 72.0

STABILITY AND REACTIVITY**Conditions to Avoid**

Stable but corrosive

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Retarder thinners cont/...

TOXICOLOGICAL INFORMATION

TOXIC : inhalation, ingestion, or skin contact with material may cause severe injury or death. Contact with molten substance may cause severe burns to skin and eyes. Effects of contact or inhalation may be delayed.

ECOLOGICAL INFORMATION

No ecological problems are expected when the product is handled and used with due care.

DISPOSAL CONSIDERATIONS**Disposal Method Product**

Disposal in accordance with local legal provisions. Disposal recommendations apply to the original material and its container and not to any materials which are a waste by-product of the user's operation. Chemical residues generally count as special waste.

The disposal of the latter is regulated through corresponding laws and regulations. We recommend that you contact the authorities in charge or approved waste disposal companies which will advise you on how to dispose of special waste.

TRANSPORT INFORMATION

<u>UN No</u>	1268	<u>Hazchem Code</u>	2x
<u>ERG No</u>	153	<u>EAC</u>	60
<u>IMDG Code</u>	8	<u>IMDG-Packaging Group</u>	11/111
<u>Marine Pollutant</u>	Yes		
<u>Class</u>	Class: 8	Corrosive Group: III	
<u>Subsidiary Risks</u>	None		
<u>Tremcard Number</u>	****		

REGULATORY INFORMATION

<u>Risk Phrases</u>	Causes severe burns
<u>Safety Phrases</u>	Keep out of reach of children. In case of contact with eyes, rinse immediately with plenty of water and seek medical advice

OTHER INFORMATION

Reason for Alteration: New Product

MANUFACTURERS NOTE

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