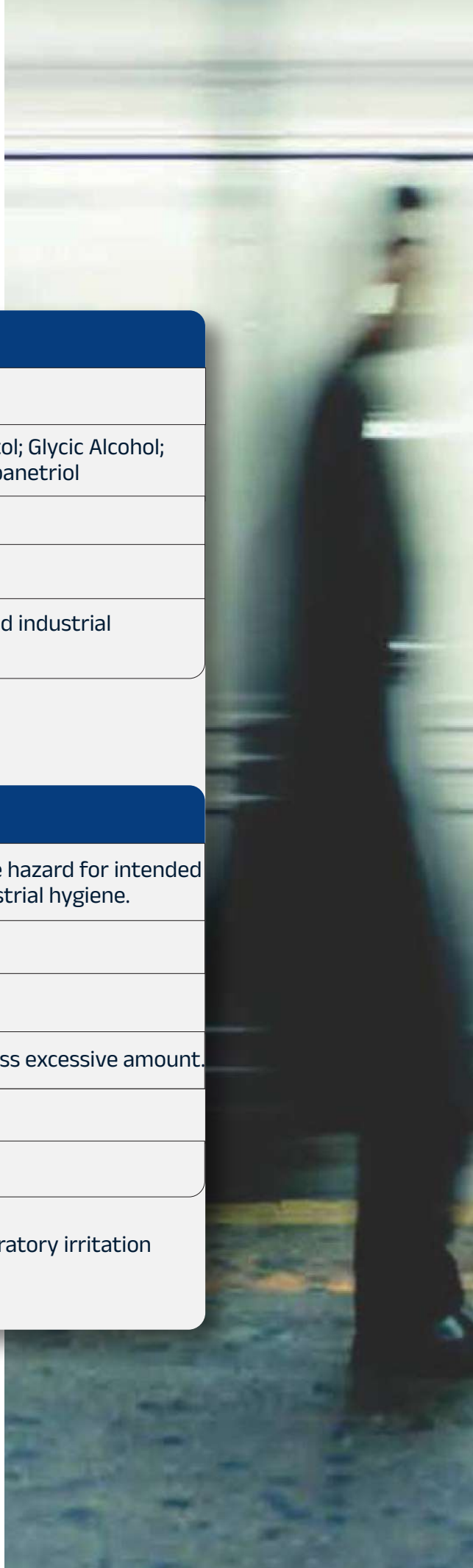
GANPATI EXIM™
Pursuing Excellence

MATERIAL SAFETY DATA SHEET

REFINED GLYCERINE



SECTION 1 - CHEMICAL PRODUCT IDENTIFICATION

Product Name	Refined Glycerine
Synonyms	Glycerol; 1,2,3-Propanetriol; Glyceritol; Glycic Alcohol; 1,2,3-Trihydroxypropane; 1,2,3-Propanetriol
CAS No	56-81-5
Chemical Formula	C3H5(OH)3
Product Use	Pharmaceutical, food, cosmetics and industrial applications

SECTION 2 - HAZARDS IDENTIFICATION

Emergency Overview	This is expected to benone hazard for intended purpose with normal industrial hygiene.
Potential Health Effects	
Inhalation	Irritation not expected.
Ingestion	Unlikelyto beharmful unless excessive amount.
Skin Contact	Irritation not expected.
Eye Contact	Irritation not expected.

If product is heated, vaporization can occur. Eye and upper respiratory irritation may occur.

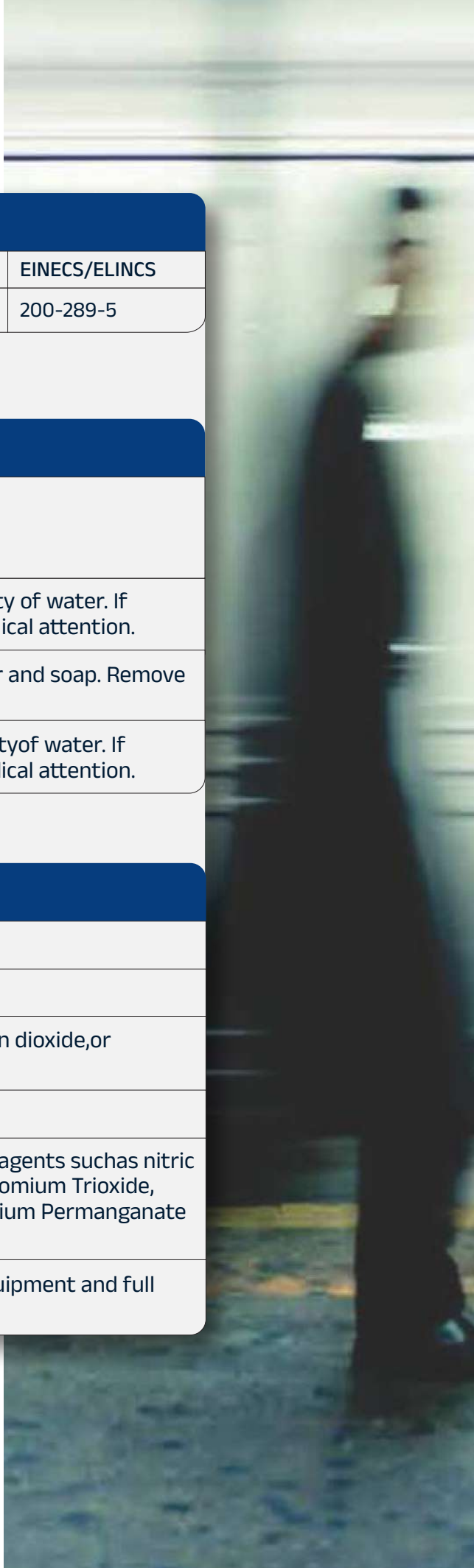
Corporate Office: B-254, Sanjay Building No. 5, Mittal Industrial Estate, Andheri Kurla Road, Andheri East, Mumbai – 400059, India
info@ganpatiexim.com www.ganpatiexim.com

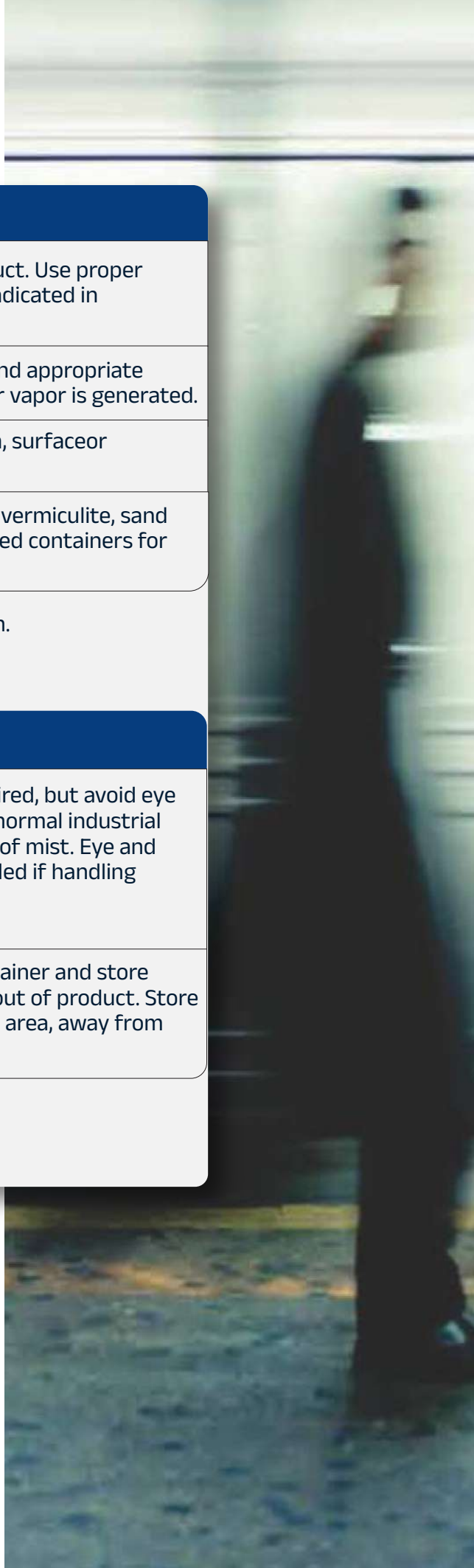
GANPATI EXIM™
Pursuing Excellence

SECTION 3 - COMPOSITION, INFORMATION ON INGREDIENTS			
CAS#	Chemical Name	Percent	EINECS/ELINCS
56-81-5	Refined Glycerine	99.5 min	200-289-5

SECTION 4 - FIRST AID MEASURES	
After inhalation	Remove to fresh air.
After ingestion	Rinse out mouth, drink plenty of water. If symptoms develop, get medical attention.
After skin contact	Wash thoroughly with water and soap. Remove contaminated clothes.
After eye contact	Immediately flush with plentyof water. If symptoms develop, get medical attention.

SECTION 5 - FIRE FIGHTING MEASURES	
Flash Point	>390°F (198.9°C)
Auto ignition Temperature	752 °F (400°C)
Fire Extinguishing Media	Use water, drychemical, carbon dioxide,or appropriate foam.
Hazardous Combustion Products	Carbon Oxides
Special hazards caused by the material, its products of combustion or resulting gases	Contact with strong oxidizing agents suchas nitric acid or other strong acids, Chromium Trioxide, Potassium Chlorate, or Potassium Permanganate may cause an explosion.
Special protective equipment for fire fighters	Wear protective breathing equipment and full protective clothing.



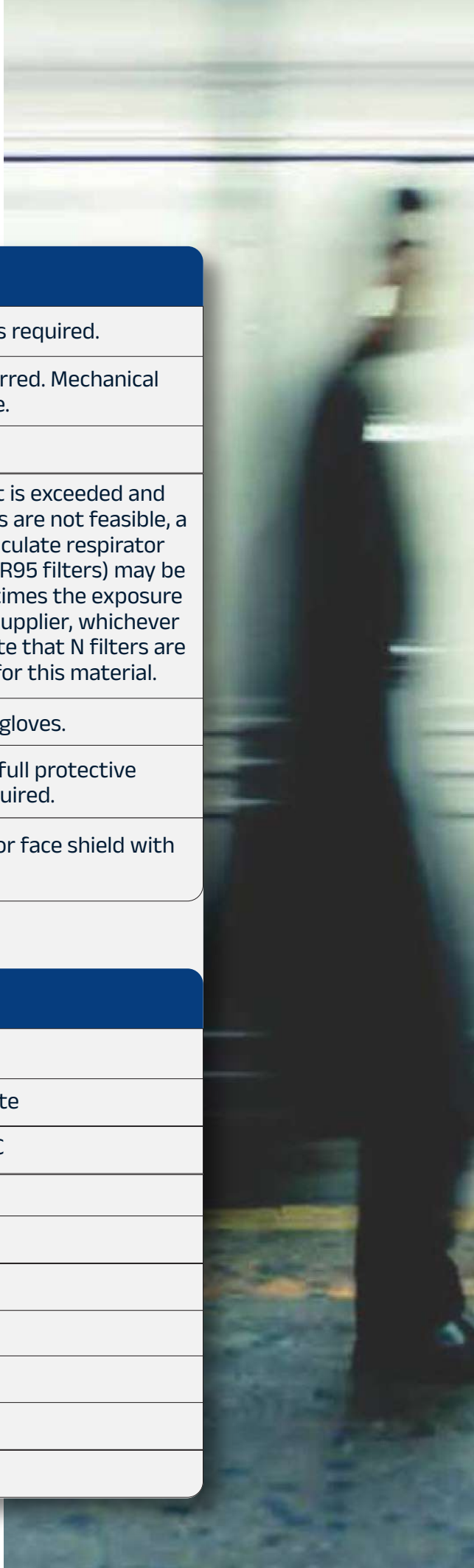


SECTION 6 - ACCIDENTAL RELEASE MEASURES	
General Information	Danger of slipping on escaped product. Use proper personal protective equipment as indicated in Section 8
Personal Precautions	Wear personal protective clothing and appropriate NIOSH approved respirator if mist or vapor is generated.
Environmental Precautions	Donotallow toenter drainagesystem, surfaceor ground water.
Measures for cleaning/collection	Absorb spill with inert material (e.g. vermiculite, sand or earth), then placein suitably labeled containers for disposal at approved site.

Refer to Section 8 for additional personal protection information.
Refer to section 13 for disposal considerations.

Section 7 - Handling and Storage	
Handling	No special precautions required, but avoid eye and skin contact as part of normal industrial hygiene. Prevent formation of mist. Eye and skin contact should be avoided if handling atelevated temperatures.
Storage	Keep in a tightly closed container and store upright to prevent anyrun-out of product. Store in a cool, dry, well ventilated area, away from incompatible substances.

Refer to section 6 for clean-up of spillages.
Refer to Section 13 for disposal considerations.



SECTION 8 - EXPOSURE CONTROLS, PERSONAL PROTECTION	
Engineering Controls	No special measures required.
Ventilation	Local exhaust preferred. Mechanical (general) acceptable.
Personal Protective Equipment	
Respiratory Protection	If the exposure limit is exceeded and engineering controls are not feasible, a half face piece particulate respirator (NIOSH type P95 or R95 filters) may be worn for up to ten times the exposure limit, or respirator supplier, whichever is lowest. Please note that N filters are not recommended for this material.
Hand Protection	Suitable protective gloves.
Body Protection	Chemical bootsand full protective clothing may be required.
Eye Protection	Protective goggles or face shield with goggles.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES	
Physical State	Viscous liquid
Odor	Odorless; sweet taste
Vapor Pressure	0.0025 mbar @ 50°C
Evaporation Rate	Not available
Viscosity	1300 mPa.sat20°C
Boiling Point	Approx. 290°C
Melting Point	Approx. 18°C
Flash Point	199°C (390°F)
Freezing Point	No data available
Appearance	Clear,colorless

pH	Neutral tolitmus
Vapor Density	3.17 (Air=1)
Specific Gravity	1.2604 at25°C
Molecular Weight	92.09 g/mol

SECTION 10 - STABILITY AND REACTIVITY

Chemical Stability	Stable under ordinary conditions of useand storage.
Conditions to Avoid	No decomposition if used according to specification.
Materials to Avoid	Contact with strong oxidizing agent such as Nitric Acid orother strong acids, Chromium Trioxide, Potassium Chlorate, or Potassium Permanganate.
Hazardous Decomposition Products	Does not decompose up to 204 C (400 F) Thermal decomposition may release acrolein.

SECTION 11 - TOXICOLOGICAL INFORMATION

Routes of entry	Absorbed through skin. Eye contact.
Toxicity to Animals	Warning: the LC50 values hereunder are estimated on basis of a 4-hour exposure. Acute oral toxicity (LD50): 4090 mg/kg (mouse). Acute dermal toxicity (LD50):10000mg/kg (rabbit). Acute toxicity of the mist (LC50): >570mg/m3 1hour (rat).
Special Remarks on Toxicity to Animals	TDL (rat)-Route: Oral; Dose: 100 mg/kg 1 day prior to mating. TDL (human)-Route: Oral; Dose: 1428 mg/kg.
Special Remarks on Chronic Effects on Humans	Glycerin is transferred across the plancenta in small amounts. May cause adverse reproductive effects based on animal data (paternal effects (Rat): spermatogenesis (including genetic material, sperm morphology, motility, and count), testes, epididymis, sperm duct). May affect genetic materials.

The following data are estimated on the basis of the raw materials contained in the product and/or of structurally comparable substances.

SECTION 12 - ECOLOGICAL INFORMATION

Persistence and degradability	Readilyand rapidly degradable
Mobility and bioaccumulation potential	Due to the distribution coefficient n-octanol/ water an accumulation in organisms is not expected.
Aquatic Toxicity	Acute fish toxicity LC_{50}> 10to 100 mg product/ l

SECTION 13 - DISPOSAL CONSIDERATIONS

Disposal is to be performed in compliance with all Federal, State/Provincial and local regulations. Do not dispose intosinks, drains or in to the immediate environment.

SECTION 14 - TRANSPORT INFORMATION

Not a hazardous material according to RID/ADR, GGVS/GGVE, ADNR, IMDG, ICAO-TI/IATA-DGR.

SECTION 15 - REGULATORY INFORMATION

Observe normal safety regulations when handling chemicals. Not subject to identification regulations under EC Directives and the Ordinanceon Hazardous Materials

SECTION 16 – OTHER INFORMATION

The given information is based on our present knowledge and subject to the product in the delivery state. The instruction provided is only for safetyand environmental requirements and is not intended to guarantee any specific product features and shallnot form any contractual validity for legal purposes