

UN/SCETDG/24/INF.41

COMMITTEE OF EXPERTS ON THE TRANSPORT OF DANGEROUS GOODS AND ON THE GLOBALLY HARMONIZED SYSTEM OF CLASSIFICATION AND LABELLING OF CHEMICALS

Sub-Committee of Experts on the
Transport of Dangerous Goods
Twenty-fourth session
Geneva, 3-10 December 2003
Item 4(b) of the provisional agenda

PACKAGINGS (INCLUDING IBC'S AND LARGE PACKAGINGS)

Additional information related to document ST/SG/AC.10/C.3/2003/44
(puncture test)

Transmitted by the expert from Spain

1.- Several pictures are attached to this document, to support doc. ST/SG/AC.10/C.3/2003/44:

- (1.)- Report of incidents.
- (2.)- Descriptions of the puncture tests carried out with two methods (Class 7 method and with the metallic cylinder (similar to test 6 Impact point 38.3.4.5.3 section 8.3 of the Manual of tests and criteria).
- (3.)- Descriptions of the instrument used in the proposed test in comparison with the test used in Class 7 (packaging B(U) AND B(M)).
- (4.)- Experimental graphic report of puncture with nails.

2.- Comments on (2.):

Puncture test basically consists of the drop of a metallic cylinder of 9,1 kg, 60 mm/42,3 cm L with an hemispheric point of 1 cm wide and 0,5 cm height over a packaging full of water from a determined height depending on the capacity of the packaging. This test is carried out by a tube vertically placed over the weakest part of the packaging (body or heads).

The height experimentally tested, for example of a metallic drum, of 220 l. and a thickness of 0,8 mm is 1,70 and it has been proved satisfactorily that at this height there is not leakage by hole or fissure.(For plastic drum or jerricanes at 1,70, the acceptable thickness level is supposed to be 2,2 mm)

3.- It is proposed that the puncture test should only be required if a minimum thicknesses (which has to be determined in collaboration with industry) is not respected.

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HEAVY METAL
MILITARY

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3/3525

A monthly round-up of hazardous materials transport and storage incidents

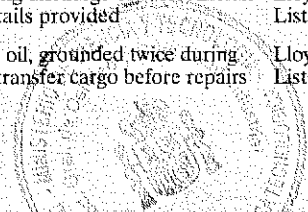
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ROAD/RAIL/AIR INCIDENTS

Date	Location	Vehicle Type	Substance	Details	Source
11/11/02	Warrington, UK	freight train	butyl chloride	Three-wagon train derailed in goods sidings; no leak reported from chloride, tetrafluoroethane; winching gear brought in to put cars	l's
20/11/02	Bloomington, Indiana, US	truck	ammonium nitrate	Semi-trailer with cargo of ammonium nitrate, liquid oxygen, blasting caps overturned near University of Indiana campus; one killed; nearby sorority houses evacuated	WNDU
21/11/02	Connellsville, PA, US	road tanker	fuel	Road tanker with cargo of unspecified fuel overturned on Route 119, spilling cargo; truck and cargo caught fire; some cargo reached Youghiogheny River; no injuries reported	KDKA-TV
24/11/02	Wymondham, Norfolk, UK	road tanker	diesel oil	Thieves stole tanker with 20,000 litres diesel from Ayton Asphalt compound; tanker later recovered with cargo, ladders, radio missing; barrel damaged to remove diesel	S Norfolk Advertiser
27/11/02	Webberville, Michigan, US	road tanker	oil	Road tanker with cargo of 'oil' crashed into service station; driver killed; facility was open at time but no injuries reported; cargo transferred to second tanker; nearby school closed	Click on Detroit
29/11/02	Avonmouth, UK	road tanker	sulphuric acid	Some 2,000 litres of 98% sulphuric acid leaked from tanker at Pickfords Vanguard tank washing station; water applied to disperse spill in mistake as cargo believed to be dilute	HInt
30/11/02	<u>nr Parnassus, New Zealand</u>	<u>truck</u>	<u>phosphoric acid</u>	<u>Some 60 litres phos acid leaked from broken drum in truck on Highway 1 in north Canterbury; spill brought under control and drum's contents transferred into container</u>	NZCity
1/12/02	Stockton, California, US	freight train	paraffin wax	15 cars of southbound UP train derailed with several cars piled up; some with hydrochloric acid remained intact; one with paraffin wax found to be leaking; no risk of explosion	Daily Review
2/12/02	<u>Naples, Florida, US</u>	<u>truck</u>	<u>hydrochloric acid</u>	<u>Six four-litre bottles of dilute hydrochloric acid fell from flatbed truck; road closed for two hours during clean-up; sodium bicarbonate applied to neutralise spill; no injuries</u>	HInt
5/12/02	Medicine Hat, Alta., Canada	freight train	sulphur	More than 40 cars of 80-car CP train with molten sulphur derailed near Medicine Hat; one car ruptured, leaking sulphur; fire threatened to cause explosion; locals evacuated	Lloyd's List

MARINE/INLAND WATERWAYS INCIDENTS

Date	Location	Vessel	Substance	Details	Source
13/11/02	east of Gibraltar	Norman Lady	-	LNG tanker (87,600 m ³ , built 1973), in ballast for Trinidad, contacted underwater object; later transpired object was nuclear submarine <i>USS Oklahoma City</i> ; minor damage to both	Fairplay
13/11/02	off Cape Finisterre, Spain	Prestige	fuel oil	Product tanker (81,500 dwt, built 1976), with 77,000 t heavy fuel oil foundered in heavy weather; later broke up and sank; pollution reached Spanish coast; single-hull ban likely	Lloyd's List
13/11/02	Higashiohshima Kawasaki, Japan	Nissho Maru No 18	paraffin	Product tanker (750 gt, built 1993), with 2,000 m ³ paraffin, collided with general cargoship <i>Koyo Maru</i> ; both vessels suffered damage but no tanks holed; no pollution or injuries	Lloyd's List
15/11/02	Kummelbank, off Denmark	Pindar	fuel oil	Bulk/oiler (54,500 dwt, built 1984), with 32,000 t heavy fuel oil, grounded on sandbar 10 nm off Laeso Island; six ballast tanks damaged but tanks were empty; vessel off route	Lloyd's List
19/11/02	R Shitalakkhaya, Bangladesh	Mayna	oil	River tanker owned by Padma Oil Co, with 250 m ³ petroleum, collided with trawler near Dhakeswari; tanker bottom badly damaged, leaking large volume of cargo; trawler arrested	Lloyd's List
21/11/02	off Cabo de Touriñan, Spain	Pointe du Castel	caustic soda	Chemical tanker (4,200 dwt, built 1992), with cargo of caustic soda for Cardiff, had piston failure, lost power; ship towed to La Coruña for repairs	Fairplay
23/11/02	Tianjin, China	Tasman Sea	crude oil	Tanker (81,200 dwt, built 1980), with 81,400 t crude for Tianjin, was hit by coastal vessel, whose anchor gouged hole in No 3 starboard tank; some 100 t crude spilled to sea	Lloyd's List
24/11/02	nr Hong Kong	Gaz Poem	LPG	Gas tanker (75,800 m ³ , built 1977), with 20,000 t LPG for Yantian, had fire in engineroom spreading to superstructure; fire raged for a week, threatening explosion; no pollution seen	Lloyd's List
24/11/02	off Milford Haven, Wales, UK	Magnitude	crude oil	Tanker (94,100 dwt, built 1992), with 90,000 t oil, discovered small leak from pinhole crack in tank; some pollution to sea; cargo transferred to other tanks; ship allowed to berth	Lloyd's List
26/11/02	Rotterdam, Netherlands	Hellenic Star	gasoil	Tanker (18,000 gt, built 1988), with 28,000 t gasoil, in collision with two other vessels at Botlek; tanker and one containership damaged; gasoil cargo discharged at Odffjell terminal	Lloyd's List
29/11/02	off Copenhagen, Denmark	Baltic Swan	oil	Product tanker (2,600 gt, built 1968), with 5,000 t oil for Copenhagen, grounded on entry to harbour; tanker pulled free after 200 t cargo lightered; no pollution reported	Lloyd's List
29/11/02	off Belém, Brazil	Stolt Tenacity	-	Chemical tanker (31,500 dwt, built 1978) had fire in engineroom, lost power; fire put out with CO ₂ ; partial power restored	Lloyd's List
5/12/02	off Singapore	Agate	crude oil	Collision between tanker (88,000 dwt, built 1985) and small cargoship 40 km off coast; port slop tank damaged; 128 t light crude spilled to sea; tanker proceeded to Balongan	Fairplay
6/12/02	Las Palmas, Canary Is	Front Lord	-	Explosion during repairs to cracked hull on tanker (284,500 dwt, built 1991) killed two, injured one; gas-free certificate had been issued	AP
10/12/02	Zhoushan, China	Oriental Venture	crude oil	Tanker (281,000 dwt, built 1992) had explosion on board during discharge of West African crude; no injuries reported by shipmanager; no further details provided	Lloyd's List
11/12/02	Suez Canal	Alphatank	fuel oil	Product tanker (111,750 dwt, built 1990), with full cargo fuel oil, grounded twice during southbound canal transit; moored at Suez outer harbour to transfer cargo before repairs	Lloyd's List



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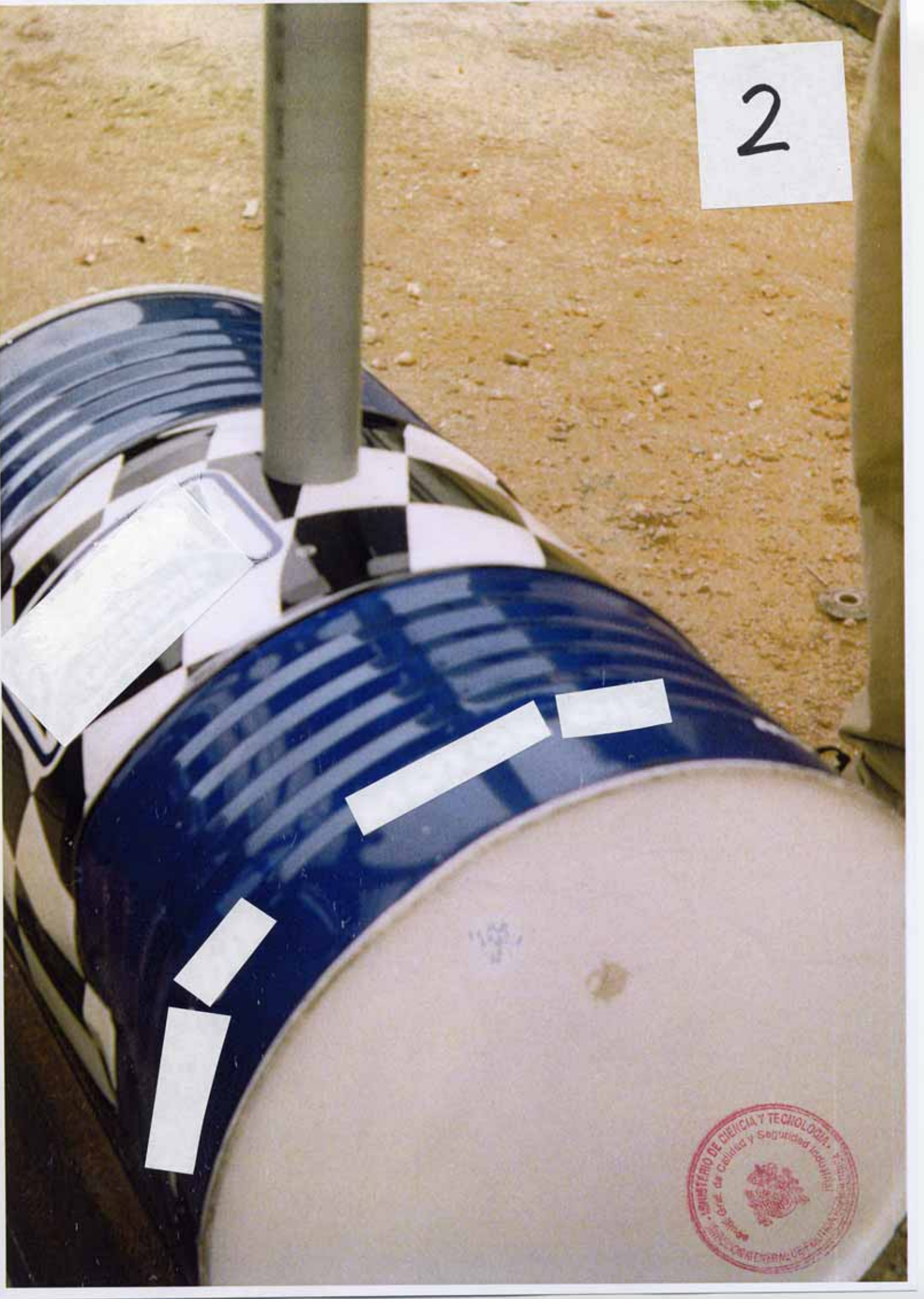
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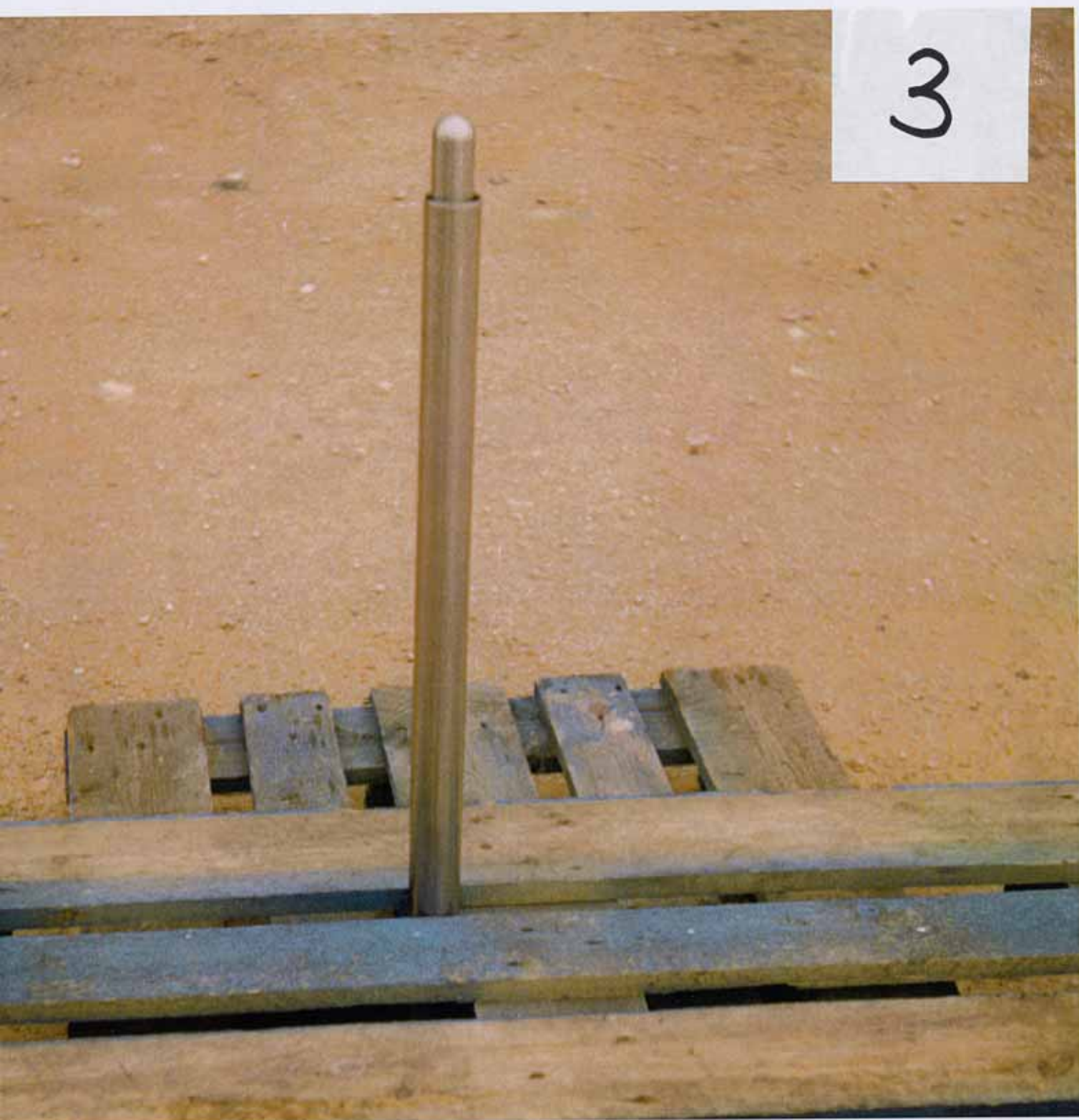
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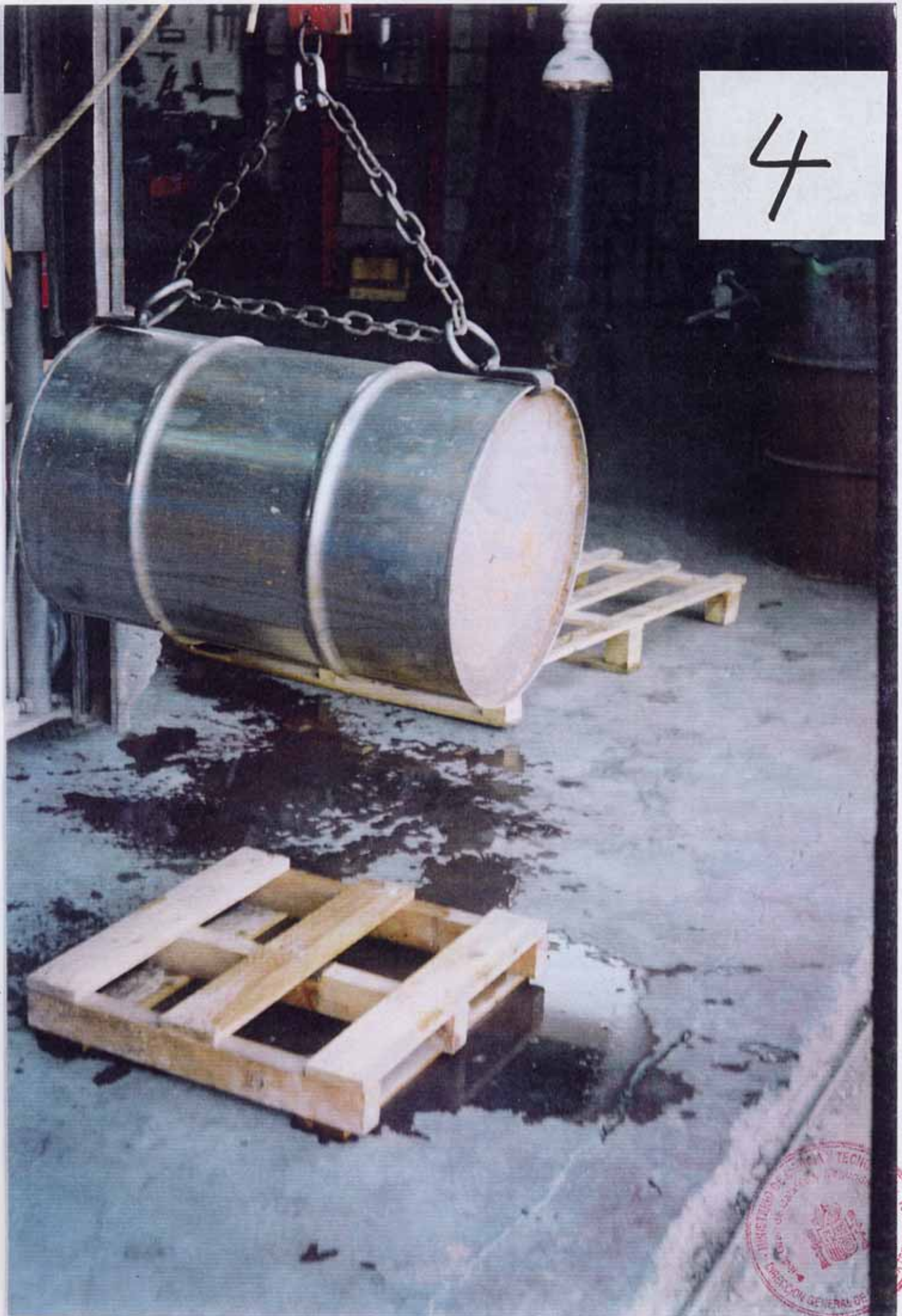
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