MATERIAL SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Trade Name **DURA INDUSTRIAL QD THINNERS (DI005)**
Synonyms Solvent.
Description Medium aromatic solvent
Dura Paints (PTY) Ltd 5 Wakefield Road; Founders View South; Edenvale; 1610; South Africa.

2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Class
Classification Moderately Hazardous
Comment Liquid Form
Hazardous and / or other relevant components

A. HAZARDOUS COMPONENTS
Petroleum Hydrocarbons such as Xylene
B. NON HAZARDOUS COMPONENTS

R-PHRASES: R10
R18
R38
R20
R65
R66

Chemical name	CAS-No.	Weight%
Light Aliphatic Petroleum Solvent	64742-89-8	30.00
Toluene	108-88-3	30.00 – 70.00
Xylene	1330-20-7	30.00 – 70.00
n-Hexane	110-54-3	< 2.00
Benzene	71-43-2	< 0.10

3. HAZARDS IDENTIFICATION

Emergency response data: Colourless liquid. Highly flammable. Vapour accumulation could flash and / or explode if in contact with any ignition source. DOT ERG No. 128

GHS Classification:

Health

Acute inhalation toxicity	Hazard category 4	Harmful if inhaled	Warning
Acute oral toxicity	Hazard category 5	May be harmful if swallowed	Warning
Skin irritation	Hazard category 3	Causes mild skin irritation	Warning
Eye irritation	Hazard category 2B	Irritant	Warning
Aspiration	Hazard category 2	May cause chemical pneumonitis.	

Environmental

Aquatic toxicity	Hazard category 2	Very toxic to fish, aquatic organisms And wildlife	Warning

Physical

Flammability	Hazard category 2	Highly flammable liquid and vapour	Warning

Hazard Statements

Flammable liquid and vapour. May be harmful if swallowed or inhaled. May cause eye and mild skin irritation.

Precautionary Statements

Response

IN CASE OF FIRE:	Use carbon dioxide, foam or dry chemical for extinction.
IF INHALED:	Call a POISON CENTRE or doctor if you feel unwell.
IF IN EYES:	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.
Continue rinsing.	If eye irritation persists: get medical attention.
IF ON SKIN:	If irritation occurs, get medical attention.

Storage

Take precautionary measures against static discharge. Ground/bond container and receiving equipment. Use only non-sparking tools. Use explosion-proof electrical, ventilating and transfer equipment. Store in a well-ventilated place and keep the container cool and tightly closed**.**

Disposal

Do not discharge into lakes, streams, ponds and ground water supply.

See section 11 for further health effects/toxicological data.

4. FIRST AID MEASURE

Ingestion	Seek immediate medical attention. Do not induce vomiting.
Skin	Wash contact areas with soap and water. Remove contaminated clothing. Dry wipe exposed skin and cleanse with hand cleaner, soap and water. Launder contaminated clothing before reuse. (See Section16 – Injection Injury)
Inhalation	Remove from further exposure. If respiratory irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with mechanical devise or use mouth-to-mouth resuscitation with a mouthpiece.
Eyes	Flush thoroughly with water. If irritation occurs call a doctor.
Note to doctors	Material if aspirated into the lungs may cause chemical pneumonitis. Treat appropriately.

5. FIRE FIGHTING MEASURES

Extinguishing Media:	Carbon dioxide, foam, dry chemical and water fog.
Special fire fighting procedure	Water spray should only be used to keep fire-exposed containers cool, flush spills away from exposures, disperse vapours and protect personnel attempting to stop leak. Prevent runoff from fire control or dilution from entering streams, municipal sewers, or drinking water supply.
Special protective equipment for fire fighters	For fires in enclosed areas, fire fighters must use Self-Contained Breathing Apparatus.
Unusual fire and explosive hazards Flammable	
Products of decomposition	Fumes, smoke and carbon monoxide.
Flash Point	< 0°C (ASTM D-56)
Upper Explosion Limit (UEL)	6.0% (V)
Lower Explosion Limit (LEL)	0.8% (V)
NFPA Hazard ID	Health: 0; Flammability: 2; Reactivity: 0

6. ACCIDENTAL RELEASE MEASURES

Procedure if material is Released or spilled	Report spills/releases as required to appropriate authorities.
Methods for cleaning up	Absorb on fire-retardant treated sawdust, diatomaceous earth, etc. Shovel up with spark-resistant utensils for later disposal at an approved facility, in accordance with current laws and regulations.
Personal precautions	See Section 8.
Environmental precautions	Prevent spills from entering municipal sewers or drains and contact with soil.

7. HANDLING AND STORAGE

Safe handling advice	Avoid prolonged repeated skin contact.
Storage information:	Store away from all ignition sources in a cool, well ventilated area. This product is a static accumulator, therefore, all storage containers should be grounded and bonded. Drums should also be equipped with self-closing valves, pressure vacuum bungs and flame arresters.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational Exposure Limits (OELs)

Components	CAS-No.	Source	TWA	Value		Notations
Light Aliphatic Petroleum Solvent	64742-89-8	ACGIH TLV		525mg/m3	100 ppm	
Toluene	108-88-3	ACGIH TLV	LTEL STEL	188 mg/m3 560 mg/m3	50 ppm 150 ppm	Skin; A4; BEI Estimated
Xylene	1330-20-7	ACGIH TLV OSHA PEL	LTEL STEL LTEL STEL	434 mg/m3 651 mg/m3 435 mg/m3 655 mg/m3	100 ppm 150 ppm 100 ppm 150 ppm	A4, BEI
n-Hexane	110-54-3	ACGIH TLV EOMECS	LTEL STEL LTEL	176 mg/m3 528 mg/m3 70mg/m3	50 ppm 150 ppm 20 ppm	Skin; BEI

LTEL: Long Term Exposure Limits – Time weight Average (TWA) over 8 hours.

STEL: Short Term Exposure Limits – Time Weight Average (TWA) over 15 Minutes

Note: Limits shown for guidance only. Follow applicable regulations.

Personal Protective Equipment (PPE)

Engineering controls	Use in well ventilated area. Explosive-proof ventilation equipment with local exhaust is desirable.
Respiratory protection	Approved respiratory equipment must be used when airborne concentrations are unknown or exceed the recommended exposure limit. Self-Contained Breathing Apparatus may be required for use in confined or enclosed spaces. Respirator with a vapour filter (EN 141) is recommended.

Eye protection	Normal industrial eye protection practices should be employed.
Skin and body protection	If prolonged or repeated skin contact is likely wear solvent-resistant gloves and clothing. Suitable gloves: Material: butyl-rubber Break through time: 4 hours Material thickness: 0.5 mm Unsuitable gloves: Material: Polyvinylchloride, leather, nitrile rubber/latex, natural rubber/latex. Good personal hygiene practices should always be followed

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid	**Colour**	Colourless
Odour	Aromatic	**Water solubility**	Negligible
Boiling point	> 80ºC	**Flash Point**	<10ºC (ASTM D-56)
Upper Explosion Limit (UEL)	6.0% (V)	**Vapour pressure**	< 20 hPa
Lower Explosion Limit (LEL)	0.8% (V)	**Density**	0.8150 g/cm3 @ 20ºC (ASTM D-4052)
Viscosity, Kinematic	< 2mm2/s @ 40ºC (ASTM D-445)		

10. STABILITY AND REACTIVITY

Stability	Stable
Hazardous thermal decomposition / combustion products	Fumes, smoke and carbon monoxide.
No reaction with fire-fighting water.	Avoid contact with strong oxidising agents.
Incompatibility (material to avoid)	Strong oxidizers.
Conditions to avoid	Heat, sparks, flame and build up of static electricity.

11. TOXICOLOGICAL INFORMATION

Acute oral toxicity	(Rats): Practically non-toxic (LD50: greater than 2000mg/kg). Based on testing of similar Products and/or components. Warning Hazard category 5. Practically non-toxic, but when Swallowed can cause lung damage.
Acute dermal toxicity	(Rabbits): Practically non-toxic (LD50: greater than 2000 mg/kg). Based on testing of Similar products and/or the components. Warning Hazard category 5. May be harmful in contact with skin.
Acute inhalation toxicity	(Rats): Harmful (LC50: greater than 10 but less than 20mg/l) 4 hours. Based on testing of similar products and/or the components. Warning Hazard category 4. Harmful if inhaled.
Skin irritation	(Rabbits): Mild irritant. (Primary Irritation Index: greater than 0.5 but less than 3). Based on testing of similar products and/or the components. Warning Hazard category 3. Causes mild skin irritation.
Eye irritation	(Rabbits): Mild irritant. (Draize score: greater than 6 but 15 or less). Based on testing of similar products and/or the components. Warning Hazard category 2B. Causes eye irritation.
Respiratory and skin sensitization	This product was not a skin sensitizer when tested in a Modified Buehler Guinea Pig Sensitization Assay.
Germ cell mutagenicity	This product tested negative in a series of mutagenic tests.
Carcinogenicity	Certain straight-run middle distillates have been found to produce skin tumors in Laboratory mouse skin-painting tests, but these have usually indicated that the irritation Can produce tumours. Therefore, if the precautions outlined in this SDS are followed to Minimize repeated or prolonged skin contact which could cause irritation, these oils Should pose no carcinogenic hazard to humans.
Reproductive toxicity (Teratogenicity)	Negative in a series of genetic assays and teratological studies.
Specific target organ toxicity (STOT) - single exposure	Respiratory irritation, dizziness, nausea and loss of consciousness.
Specific target organ toxicity (STOT) – Repeated exposure	Prolonged repeated skin contact with low viscosity materials may defat the skin resulting in possible irritation and dermatitis. Animal studies with similar materials by inhalation for 12 months showed no significant neurotoxic, blood, kidney or other effects.
Aspiration hazard	Material if aspirated into the lungs may cause chemical pneumonitis. Warning Hazard Category 2.

12. ECOLOGICAL INFORMATION

Ecotoxicity effects

Toxicity to fish	(Salmon) LC/EC50: 8.1 mg/l at 96 hours. Warning Hazard category 2.
Toxicity to aquatic organisms	(Daphnia magna) LC/EC50: 6mg/l at 48 hours. (Green algae) LC/EC50: 9.4 mg/l at 8 hours.

Elimination information (persistence and degradability)

Biodegradability	Readily Biodegradable
Mobility	Water solubility: 500 mg/l @ 20ºC
Bioaccumulation	Bioconcentration factor (BFC) < 100

Further information on ecology

Remarks	This environmental assessment is based on test data for this product (or estimated data).

13. DISPOSAL CONSIDERATIONS

Waste disposal	Product is suitable for burning in an enclosed, controlled burner for fuel value or disposal by supervised incineration. Such burning may be limited pursuant to the Resource Conservation and Recovery Act. In addition, the product is suitable for processing by an approved recycling facility or can be disposed of at any government approved waste disposal facility. Use of these methods is subject to user compliance with applicable laws and regulations and considerations of product characteristics at time of disposal.
Contaminated packaging	Empty containers retain residue (liquid and/or vapour) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Do not attempt to refill or clean container since residue is difficult to remove. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner. All containers should be disposed of in an environmentally safe manner and in accordance with governmental regulations.
Other regulations	Disposal of unused product may be subject to RCRA regulations (40 CFR 261). Disposal of the used product may also be regulated due to ignitability, corrosivity, reactivity, or toxicity as determined by the Toxicity Characteristics Leaching Procedure (TCLP).
Flash point	< 0 ºC (ASTM D-56)

14. TRANSPORT INFORMATION

ADR / CFR / IATA_C

Shipping name:	Flammable liquid n.o.s. (CONTAINS LIGHT ALIPHATIC PERTOLEUM SOLVENT).
Packaging group:	II
Hazard Class:	3
Letter:	F
UN / S.I.N Number:	1268

IMDG

Shipping name:	Flammable liquid n.o.s. (CONTAINS LIGHT ALIPHATIC PERTOLEUM SOLVENT).
Packaging group:	II
Hazard Class:	3
Letter:	F
UN / S.I.N Number:	1268
Marine pollutant	Marine Pollutant
Medical First Aid Guide (MFAG) table	311
Emergency Schedule (EmS)	3-07
IMDG code page number	3271
Static Accumulator (50 picosiemens or lens)	Yes

15. REGULATORY INFORMATION

US OSHA Hazard Communication Standard	Product assessed in accordance with OSHA 29 CFR 1910.1200 and determined to be Hazardous.
Governmental Inventory Status	All components comply with TSCA, EINECS/ELINCS, AICS, METI, DSL, KECI, ENCS, PICCS and IECSC
EU Labelling	Product is dangerous as defined by the European Union Dangerous Substances/Preparations Directives
Symbols	F, Xn, X1 Highly flammable, Harmful, Irritant
R-Phrase (S)	R20/22, R36/38, R52/53 Harmful by inhalation and if swallowed. Irritating to eyes and skin. Harmful to aquatic organisms, May cause long-term adverse effects in the aquatic environment.
S-Phrase (S)	S36/37/39, S26, S62 Wear suitable protective clothing, gloves and eye/face protection. In case of contact with Eyes, rinse immediately with plenty of water and seek medical advice. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label.
Note	Contains Low Viscosity Oil.

SARA

U.S. Superfund Amendments and Reauthorization Act SARA Title III	This product contains no “EXTREMELY HAZARDOUS SUBSTANCES”.
SARA (311/312) Reportable Hazard Categories	Fire Chronic
SARA (313) Toxic Release	Benzene (71-43-2) – Conc < 0.1%

Chemical Name	CAS-No.	Concentration [%]	List Citations
Light Aliphatic Petroleum Solvent	64742-898-8	30.00	1, 18, 19, 20, 21, 23, 25
Toluene	108-88-3	30.00 – 70.00	1, 10, 17, 18, 19, 20, 21, 22, 23, 24, 25,26
Xylene	1330-20-7	30.00 – 70.00	1, 10, 18, 19, 20, 21, 22, 23, 24, 25,26
n-Hexane	110-54-3	<2.00	1, 10, 18, 19, 20, 21, 23, 25,26
Benzene	71-43-2	< 0.10	1, 2, 4, 6, 9, 10, 16, 17, 18, 19, 20, 21, 22,23, 24, 25,26

1 – ACGIH ALL	6 = IARC 1	11 = TSCA 4	17 = CA P65	22 = MI 293
2 = ACGIH A1	7 = IARC 2A	12 = TSCA 5a2	12 = CA RTK	23 = MN RTK
3 = ACGIH A2	8 = IARC 2B	13 = TSCA 5e	19 = FL RTK	24 = NJ RTK
4 = NTP CARC	9 = OSHA CARC	14 = TSCA 6	20 = IL RTK	25 = PA RTK
5 = NTP SUS	10 = OSHA Z	15 = TSCA 12b	21 = LA RTK	26 = RI RTK

16. OTHER INFORMATION

This data is offered in good faith as typical values and are not as a product specification. No warranty, whether expressed or implied is made. The recommended handling procedures are believed to be generally applicable. However, each user should review these recommendations in the specific content of the intended use.

C	=	Ceiling limit	NEGL	=	Negligible
EST	=	Estimated	NF	=	None found
NA	=	Not applicable	UNKN	=	Unknown
NE	=	None established	REC	=	Recommended
ND	=	None determined	V	=	Recommended by vendor
TS	=	Trade secret	SKN	=	Skin
R	=	Recommended	MST	=	Mist

END OF MSDS

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