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Section 1: Identification of the substance or mixture and the company

1.1. Product Identifier

Name: #53-000270 PIKAL liquid metal polish The substances do not require registration according to regulation (EC) N. 1907/2006 (REACH).

1.2 Relevant applications of the material and uses advised against

Polishing and cleaning of metals, hard materials, enamels to a mirror finish. Abrasive material.

1.3. Company details

Rave Scientific 100 Franklin Square Dr. Suite 101 Somerset, NJ 08873 Telephone: 1-732-898-3828 Email: info@ravescientific.com Web: www.ravescientific.com

1.4 Emergency telephone number

911 (USA) or your national emergency telephone number for chemical spills, leaks, fires, exposures or accidents

Section 2: Hazards identification

2.1. Classification of the substance or mixture according to Regulation EC Nr. 1272/2008

Physical:	Flammable material, H223
Health:	Harmful if inhaled, category 1, H332
	Causes skin irritation, category 2, H315
	Causes serious eye irritation, category 2, H319
	Suspected of causing cancer, H351
	May cause damage to organs through prolonged or repeated exposure, H373
Environment:	Not classified
Other hazards:	Repeated exposure may cause skin dryness and cracking, EUH066
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2.2 Labeling elements ac	cordance to Regulation I	EC Nr. 1272/2008	
Hazard pictogramm	u(s):		
	GHS07	GHS08	
Signal word:	Danger		
Hazard statement(s): H223: Flamma	ble material	
	H315: Causes s		
		ise an allergic skin reaction	
	-	serious eye irritation	
		ise damage to organs through (prolonged or repeated
			prototiged of repeated
	exposur		
	-	ed of causing cancer	d
	ЕОНОбб: кере	ated exposure may cause skin o	aryness and cracking
Precautionary state	ment(s)		
Prevention:	P101: If medica	al advice is needed, have produ	uct container or label at hand
	P102: Keep ou	t of reach of children	
	P233: Keep cor	ntainer tightly closed	
	•	eathing dust/fumes/gas/mist/v	vapour/sprav
		lease to the environment	
		otective gloves/protective clot	hing/eve protection/face
	protection		
Response:	•	wed: Immediately call a poison	
nesponse.		physician/first aider	•
		ed or concerned: Get medical a	ttention
	-	induce vomiting	
r		s: Rinse cautiously with water f	or soveral minutes
		ct lenses if easy to do. Continue	
			0
	-	ritation persists: Get medical at	
		n: Wash with plenty of water a	-
		contaminated clothing and was	
Storage:		a well-ventilated place. Keep c	001.
	P405: Store loo	•	
Disposal:	-	of contents/container in accord	dance with local/regional/
		national regulations	
Supplemental haza	rd info: None		Contd. on page 3



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2.3 Other hazards

Not applicable

Section 3: Composition / information on components

3.1. Substances

Name: #53-000270 PIKAL liquid metal polish

3.2 Mixtures

Component	CAS Nr.	EC Nr.	WT%
Mineral oil	8042-47-5	232-455-8	10-30
Mineral turpentine	8008-20-6	232-366-4	10-30
Ethylene Glycol	107-21-1	203-473-3	1-5
Aluminium Oxide Al2O3	1344-28-1	215-691-6	15-25
Xylene	1330-20-7	203-576-3	<1
Water	7732-18-5	231–791-2	1-10

Section 4: First aid measures

4.1. Description of first aid measures

Contact with eyes:	Rinse cautiously with water for several minutes. If possible, remove contact lenses. Continue rinsing.
Contact with skin:	Wash with water and soap.
	Seek medical attention if irritation persists.
Inhalation:	Fresh air, keep warm and at rest.
	Seek medical attention of ill effects occur
Ingestion:	If swallowed, do not induce vomiting
	Seek immediate medical advice

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4.2. Important symptoms and effects, either immediate or delayed Inhalation: Inhalation may irritate nose, throat and lungs Ingestion: May cause nausea, vomiting, stomach and diarrhea Skin contact: Prolonged contact may cause skin irritation Eye contact: Irritating to eyes

4.3. Indication of any immediate medical attention and special treatment

General advice: If you feel unwell, seek medical advice; show product label if possible If symptoms persist, always call a doctor

Section 5: Firefighting Measures

5.1. Extinguishing media

Dry foam, carbon dioxide, dry chemical or water spray and sand. Do not use water jet.

5.2 Special hazards arising from the substance or mixture

Carbon dioxide, carbon monoxide, nitrogen oxide, unburned hydrocarbons

5.3 Advice to firefighters

Fight fire from a safe distance, with adequate cover Do not move the load if exposed to heat. In case of fire; do not breathe fumes Wear self-contained breathing apparatus for fire fighting

Section 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wear protective equipment Keep unprotected persons away Ensure adequate ventilation

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6.2 Environmental precautions

Do not allow to enter public sewers and waterways

6.3 Methods and material for containment and clean up

Clean up spills immediately Avoid breathing vapours Control personal contact with the substance, by using protective equipment Collect spillage, absorbed spillage and wipes in a flammable waste container Wash spill area with soap and water to remove last traces of residue

6.4 Reference to other sections

For further information see section 7, 8 and 13.

Section 7: Handling and storage

7.1. Precautions for safe handling

Avoid breathing dust/mist Ensure adequate ventilation Avoid using hot materials and fire around working area Avoid contact with skin and eyes Wash thoroughly after use Wear protective gloves/protective clothing/eye protection Flammable when heated

7.2 Conditions for safe storage, including any incompatibilities

Store locked up in a cool dry place below 40°C out of direct sun light Isolate from ignition source such as heat, sparks, open flame Keep container tightly sealed Keep out of reach of children

7.3 Specific end uses(s)

Not required

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Section 8: Exposure control and personal protection

8.1. Control parameters

Occupational exposure limits (OEL)

Ingredient	TWA	STEL
Mineral oil	200mg/m3	Not available
Mineral turpentine	200mg/m3	Not available
Ethylene Glycol	52mg/m3	104mg/m3
Aluminium Oxide Al2O3	Not available	Not available
Xylene	100mg/m3	150mg/m3
Water	Not available	Not available
PIKAL professional metal polishing paste	Not available	Not available

8.2 Exposure controls

Control procedures:	Avoid creating dust Ensure adequate ventilation Only use small amounts Wash hands before breaks and at the end of the work Maintain appropriate working environment
Personal protection:	Protective work clothing
Inhalation:	Use breathing protection with high concentrations
Hands and skin:	Suitable gloves
Eyes:	Wear safety goggles or full-face protection

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Section 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance/physical state:	Liquid
Colour:	Creamy white
Odour:	Characteristic
рН	9-11
Freezing point/range:	0°C
Boiling point/range:	Not available
Flash point:	80°C (closed cup)
Evaporation rate:	Not applicable
Explosion limits: upper limit:	Not determined
lower limit:	Not determined
Vapour pressure:	Not determined
Relative density:	1.1 g/cm3 @ 20°C
Solubility in water:	Dispersible
Auto-ignition:	Product is not self-igniting
Viscosity:	Not determined

9.2 Other information

VOC:

up to 20% mineral oil /mineral turpentine

Section 10: Stability and reactivity

10.1. Reactivity

No hazardous reactions known if used for its intended purposes

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

None known

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10.4 Conditions to avoid

Avoid hot surfaces, heating, freezing

10.5 Incompatible materials

Strong oxidising agents

10.6 Hazardous decomposition products

By heating, petroleum components (kerosene) turn into inflammable vapour

Section 11: Toxicological information

11.1. Information on toxicological effects

Information on likely routes of exposure:

Inhalation:	May cause damage to lungs, chemical pneumonitis		
Skin contact:	May cause irritation		
Eye contact:	Irritant, caustic effect		
Sensitisation:	No sensitising effects known		
CMR effects:	Product should be classified as carcinogenic		
	Germ cell mutagenicity classification criteria not met based on available data		
Reproductive toxicity classification criteria not met based on available data			
STOT-single exposure: may cause drowsiness or dizziness			
STOT- repeated	exposure: may cause skin dryness and cracking		
Aspiration haza	rd: May be fatal if swallowed and enters airway		

Toxicological data LD/LD50 values

No information available

Symptoms related to physical, chemical and toxicological characteristics

If swallowed:	Discomfort, nausea, diarrhea
If in eyes:	Causes serious eye irritation
If inhaled:	Fatigue, dizziness, narcosis
If on skin:	Repeated exposure may cause skin dryness or cracking

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11.2. Endocrine disrupting properties

Not listed

11.3. Toxicity

There is no additional information

Section 12: Ecological information

12.1. Aquatic toxicity

Harmful to fish

12.2 Persistence and degradability

No further relevant information available

12.3 Bio-accumulative potential

No further relevant information available

12.4 Mobility in soil

No further relevant information available

12.5 Results of PBT and vPvB assessment

No further relevant information available

12.6 Hazardous decomposition products

No information available

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Section 13: Disposal considerations

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13.1. Waste treatment mether	ıods		
Product:	This material and its container must be disposed of in a safe way. Do not discharge into drains or the environment, dispose to an authorised waste collection point.		
National regulations:	Disposal should be in accordance with local, state or national legislation.		
Section 14: Transport inf	ormation		
14.1. UN number			
UN-number:	N/A		
14.2 UN proper shipping na	me		
Proper shipping name:	N/A		
14.3 Transport hazard class(es)		
Class: ADR/RID-Classification	N/A code: N/A		
14.4 Packing group			
Packing:	N/A		
14.5 Incompatible materials			

N/A

ADR/RID- Environmentally hazardous: N/A IMDG-Marine pollutant: N/A IATA/ICAO-Environmentally hazardous: N/A

14.6 Special precautions for user

ADR/RID-Tunnel code:

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IMDG-Ems:	N/A	Contd. of page 10
IATA/ICAO-PAX:	N/A	
IATA/ICAO-CAO:	N/A	

14.7 Transport in bulk according to Annex II of MARPOL73/78 and the IBC code

Not applicable

Section 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

No further data available

15.2 Chemical safety assessment

No information available

Section 16: Other information

RoHS Directive Compliant

This product is fully compliant with the directive 2100/65/EU Annex II (RoHS). It does not contain any lead, cadmium, mercury, hexavalent chromium, PBB's or PBDE's.

WEEE

This product is not a piece of electrical or electronic equipment, and it therefore not governed by Directive 2002/96/EC on waste electrical and electronic equipment (WEEE)

Abbreviations:

Asp. Tox	Aspiration hazard	
Carc.	Carcinogenicity	
Exp.	Exposure	
Flam.	Flammable	
GHS	Global Harmonised System of Classification of Labelling Chemicals	
Irrit.	Irritant	
LC50	Lethal Concentration 50%	
LCLo	Lowest published lethal concentration	Contd. on page 12



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LD50	Lethal Dose 50%
N/A	Not applicable
N/E	Not estimated
PBT	Persistent Bio-accumulative and Toxic
WEL	Workplace Exposure Limit
Repr.	Reproductive toxicant
RoHS	Restriction of Hazardous Substance
SEM	Scanning Electron Microscope
STEL	Short-Term Exposure Limit
STOT	Specific Target Organ Toxicity
TCLo	Lowest published toxic concentration
vPvB	very Persistent and very Bio-accumulative
WEEE	Waste Electrical and Electronic Equipment

DSD / DPD label elements



Relevant phrases

H223: Flammable material

H315: Causes skin irritation

H317: May cause an allergic skin reaction

H319: Causes serious eye irritation

H373: May cause damage to organs through prolonged or repeated exposures

H351: Suspected of causing cancer

EUH066: Repeated exposure may cause skin dryness and cracking

This product should be stored, handled, and used in accordance with good industrial hygiene practices and in accordance with any legal regulation.

The information contained herewith is based on the present state of our knowledge and is intended to describe the product from the point of view of safety requirements. It does not guarantee any specific properties.

It is the responsibility of the user to query and verify any information seeming suspect or where doubt on the validity may exist. The buyer assumes all responsibility of using and handling the product in accordance with local, state, federal and international regulations.

End of document



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