Material Safety Data Sheet

1. Product and company identification

Product Name: 50 Fluid

Product Use: Silicone Fluid

Company: Motion Picture F/X Company

2923 Thornton Ave. Burbank, CA 91504

Phone. 818-563-2366 Fax. 818-563-2389

Email. orders@motionpicturefx.com

Emergency Phone: Call INFOTRAC at 1-800-535-5053 or 1-352-323-3500 (outside USA)

24-hour / 7 days a week.

2 Composition/information on ingredients

2.1 Chemical characterization (substance)

Chemical characteristics
Polydimethylsiloxane

2.2 Information on ingredients:

Type	CAS No.	Substance	Content	[wt. %]	Note
			Lower	Upper	
INHA	63148-62-9	Polydimethyl siloxane	100.0	100.0	NH

Type: HYD - by-product upon hydrolysis, INHA - ingredient, NEBE - by-product, MONO - residual monomer, VERU - impurity, VUL - by-product upon vulcanization. *** Note: Cl - IARC carcinogen, C2 - NTP carcinogen, C3 - OSHA carcinogen, NH - non-hazardous, R - reproductive toxin.

This material does not contain any OSHA OF WHMIS reportable nazaraous ingresients.

Substances listed in the Subsections "HAPS" and "California Proposition 65 Carcinogens / Reproductive Toxins" that are not listed in Section 2 are only present at quantities below 0.1% for California Proposition 65 listed toxins or below 1% for non-carcinogenic HAPS or they are inextricably bound in the product.

3 Hazards identification

3.1 Hazards classifications

HMIS® rating (product as packaged):

Health: 1

Fire: 1

Reactivity: 0

PPE: B

Hazardous Materials Identification System and HMIS are registered trademarks of the National Paint and Coatings Association. (HMIS codes are based on contact with the product as packaged and any hydrolysis by-products, if present.)

Canadian WHMIS Classification: None.

3.2 Emergency overview and potential hazards

This material is not hazardous under OSHA criteria. This material is not hazardous under WHMIS criteria. Liquid silicone based materials have lubricating properties that can substantially reduce or eliminate traction and may pose a slip hazard. Please use warning labels on consumer products where traction is essential for safety.

Physical Hazards:

No known physical hazards.

Acute health effects

Route of entry or possible contact:

eyes , skin .

Eye contact:

May cause slight eye irritation.

Skin contact:

No acute toxic effects are expected.

Inhalation:

Inhalation is not expected due to low vapor pressure.

Incestion:

Not expected in industrial use.

Additional information on acute health effects:

The toxicological evaluation is based on test results with a similar product.

3.3 Further information:

Chronic health effects:

No known or expected chronic health effects.

Medical conditions which may be aggravated by exposure:

none known

Target organs affected:

No known internal organ effects.

Signs and Symptoms of Exposure:

Refer to Acute Health Effects, listed above.

Carcinogens/Reproductive toxins:

There are no carcinogenic ingredients present at or over 0.1% in this material. This material does not contain any reproductive toxins at or above OSHA or WHMIS reportable levels.

See Section 11 for Toxicological Information, if any.

4 First-aid measures

4.1 General information:

Get medical attention if irritation or other symptoms occur. Before seeking medical attention remove contaminated clothing and shoes. Take a copy of the Safety Data Sheet when going for medical treatment.

4.2 After inhalation

Material cannot be inhaled under normal conditions. No special measures required.

4.3 After contact with the skin

For skin contact, immediately wipe away excess material. Use a waterless hand cleaner to remove as much of the remaining material as possible. Wash with soap and water.

4.4 After contact with the eyes

If contact with eyes, immediately hold eyelids apart and flush with plenty of water for at least 15 min.

4.5 After swallowing

After swallowing No special treatment is required.

4.6 Advice for the physician

Treat symptomatically.

Fire-fighting measures

5.1 Flammable properties:

Flash point..... > 204 °C (> 399 °F)

Flash point..... > 238 - 263 °C (460 - 505 °F)

Upper explosion limit (UEL)..... not determined

Method (DIN 51376)

(ASTM D93)

Boiling point / boiling range....: not determined

Lower explosion limit (LEL)..... not determined

Ignition temperature not determined NFPA Hazard Class (comb./flam.liquid): IIIB

5.2 Fire and explosion hazards:

This material does not present any unusual fire or explosion hazards.

5.3 Recommended extinguishing media:

water-mist , carbon dioxide , sand , dry chemical or alcohol-resistant foam .

5.4 Unsuitable extinguishing media:

water-spray , sharp water jet .

5.5 Special exposure hazards arising from the substance or preparation itself, combustion products, resulting gases

Hazardous decomposition products: carbon dioxide , carbon monoxide , formaldehyde , silicon dioxide and incompletely burnt hydrocarbons .

5.6 Fire fighting procedures:

Fire fighters should wear full protective clothing including a self-contained breathing apparatus. Cool endangered containers with water.

Accidental release measures

6.1 Precautions:

6

If material is released indicate risk of slipping. Do not walk through spilled material. HAZWOPER PPE Level: D

6.2 Containment:

Prevent material from entering surface waters, drains or sewers and soil. Contain any fluid that runs out using suitable material (e.g. earth). Close leak if possible without risk. Spills of material which could reach surface waters must be reported to the United States Coast Guard National Response Center's toll free phone number (800) 424-8802.

6.3 Methods for cleaning up

Take up mechanically and dispose of according to local/state/federal regulations. For small amounts: Absorb with a liquid binding material such as diatomaceous earth and dispose of according to local/state/federal regulations. Contain larger amounts and pump up into suitable containers. Clean any slippery coating that remains using a detergent / soap solution or another biodegradable cleaner. Apply sand or other inert granular material to improve traction.

Handling and storage

7.1 Handling

Precautions for safe handling:

Spilled substance increases risk of slipping.

Precautions against fire and explosion:

Observe the general rules for fire prevention.

7.2 Storage

Conditions for storage rooms and vessels:

Advice for storage of incompatible materials:

not applicable

Further information for storage:

Keep container tightly closed. Store in a dry and cool place.

8.1	Engineering controls	~		-		
	Ventilation:					
1	Use with adequate ventilation.					
	Local exhaust:					
i	not necessary					
8.2	Associate substances with specific cont		uch as	limit val	nea	
	Maximum airborne concentrations at the					
	CAS No. Material	TYP	*	mg/m³	ppa	Dust fract.
	none known					
8.3	Personal protection equipment (PPE)					
	Respiratory protection:					
ı	Respiratory protection is not normally	required.				
	Hand protection:	_				
1	Any liquid-tight rubber or vinyl gloves Eye protection:	3.				
ı	Safety glasses with side shields or che	emical safety gogo	cles.			
•	Other protective clothing or equipment:	• • •	,			
1	Additional protective clothing or equip	pment is not norma	ally re	equired. P	rovide eye	bath and
į	safety shower.					
8.4	General hygiene and protection measures	B:				
ı	Avoid contact with eyes, skin and cloth					
I	standard industrial hygiene practices w	when using this ma	aterial	L. Wash th	oroughly a	fter handling.
0	Physical and chemical properties	*			·	
2		·	<i></i>		· · · · · · · · · · · · · · · · · · ·	
9.1	Appearance Physical state / form:					
	Colour		s			
	Odour		_			
9.2	Safety parameters					Mathod
7.4	Melting point / melting range:	not determined				Me Chod
	Boiling point / boiling range:					
	Flash point		°F)			(DIN 51376)
1	Flash point:		460 -	505 °F)		(ASTM D93)
	Ignition temperature:					
	Lower explosion limit (LEL)					
	Upper explosion limit (UEL)		°C 16	D °E1		(not
	TAPONE PROGRAMMENT TO THE PROGRA	\ 0.15 Hra &c 20		O E;		specified)
1	Density:	0.953 - 0.977 g/	cm³			opour Luca,
-	Water solubility / miscibility:	insoluble				
	pH-Value					
ı	Viscosity (dynamic):	50 mPa.s				
9.3	Further information					
	Percent Volatiles					
	voc:	0.0000 g/l				(calculated
	Corrosive to Steel or Aluminum:	Not correcine **	etoo?	Ar al		value)
		wer correstas to	OFERT	or armeri	tusit.	

10 Stability and reactivity

10.0 General information:

If stored and handled in accordance with standard industrial practices no hazardous reactions are known.

10.1 Conditions to avoid

none known

10.2 Materials to avoid

none known

10.3 Hazardous decomposition products

If stored and handled properly: none known. Measurements have shown the formation of small amounts of formaldehyde at temperatures above about 150 °C (302 °F) through oxidation.

10.4 Further information:

Hazardous polymerization cannot occur.

11 Toxicological information

11.1 General information:

Toxicological testing has been conducted with similar product(s).

11.2 Toxicological data:

wence correctly	Acute Coxtesty (ID30/IC30-Asides Laleague to dissettication):				
Exposition	Value/value range	Species			
oral	> 5000 mg/kg	rat	literature		
dermal	> 2008 mg/kg	rat (Limit Test)	test report		

Primary irritation:

Exposition	Effect	Species/Test system	Source
to skin	not irritating	rabbit	test report
to eyes	not irritating	rabbit	test report

Sensitization:

Exposition	Effect	Test method	Species	Source
to skin	not sensitizing	Magnusson-	guinea-pig	test report
		Klicmann		

Reference points for mutagenic potential:

Test system	Rffect	Source
Bacterial Reverse Mutation Test	not mutagenic	test report

Experience with man

Human patch test: Product displays good compatibility with the skin.

12 Ecological information

12.1 Information on elimination (persistence and degradability)

Biodegradation / further information:

Biologically not degradable. Polydimethylsiloxanes are degradable to a certain extent in abiotic processes.

Further information:

Elimination by adsorption to activated sludge.

12.2 Behaviour in environmental compartments

Mobility

Insoluble in water. Forms thin oil film on surface of water. Absorbed by floating particles. Separation by sedimentation.

Further information:

Bioaccumulation is not expected to occur.

No expected damaging effects to aquatic organisms.

According to current knowledge adverse effects on water purification plants are not expected.

Effects in sewage treatment plants (bacteria toxicity: respiration-/reproduction inhibition):

12.4 Additional information Other harmful effects

Recommendation:

Disposal considerations

12.3 Ecotoxicological effects:

General information:

none known

13

15

13.1 Product disposal

Material that cannot be used or chemically reprocessed should be disposed of at an approved facility in accordance with any applicable governmental regulations.

13.2 Packaging disposal Recommendation:

Completely discharge containers (no tear drops, no powder rest, scraped carefully). Containers may be recycled or re-used. Observe local/state/federal regulations.

Transport information 14.1 US DOT & CANADA TDG SURFACE

Valuation..... Not regulated for transport Corrosive to Steel or Aluminum: Not corrosive to steel or aluminum.

14.2 Transport by sea IMDG-Code Valuation..... Not regulated for transport

14.3 Air transport ICAO-TI/IATA-DGR Valuation..... Not regulated for transport

Regulatory information 15.1 U.S. Federal regulations

TSCA inventory status and TSCA information:

This material or its components are listed on or are in compliance with the requirements of the

TSCA Chemical Substance Inventory. TSCA 12(b) Export Notification:

This material does not contain any TSCA 12(b) regulated chemicals.

CERCLA Regulated Chemicals:

This material does not contain any CERCLA regulated chemicals.

SARA 302 EHS Chemicals: This material does not contain any SARA extremely hazardous substances.

SARA 311/312 Hazard Class:

This product does not present any SARA 311/312 hazards.

SARA 313 Chemicals:

This material does not contain any SARA 313 chemicals above de minimus levels.

HAPS (Hazardous Air Pollutants): This material does not contain any hazardous air pollutants.

15.2 U.S. State regulations

California Proposition 65 Carcinogens:

This material does not contain any chemicals known to the state of California to cause cancer.

California Proposition 65 Reproductive Toxins:

This material does not contain any chemicals known to the state of California to cause reproductive effects.

Massachusetts Substance List:

This material contains no listed components.

New Jersey Right-to-Know Hazardous Substance List:

This material contains no listed components.

Pennsylvania Right-to-Know Hazardous Substance List:

This material contains no listed components.

15.3 Canadian regulations

This product has been classified in accordance with the Hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

WHMIS Hazard Classes:

None.

DSL Status:

This material or its components are listed on the Canadian Domestic Substances List.

Canadian Ingredient Disclosure List:

This material contains no listed components.

15.4 Other international regulations

EU Risk Phrases:

R-Phrase	Description		 	
R-				

EU Safety Phrases:

S-Phrase	Description
s-	

Details of international registration status

Listed on or in accordance with the following inventories:

EINECS - Europe

IECSC - China

TSCA - USA

PICCS - Philippines

ENCS - Japan

ECL - Korea

DSL - Canada

AICS - Australia

16 Other information

16.1 Additional information:

Kosher: Yes

This Material Safety Data Sheet (MSDS) meets the requirements of the Federal OSHA Hazard Communication Standard (29 CFR 1910.1200). This product has been classified according to the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all of the information required by the CPR. This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief accurate and reliable as of the date compiled. However, no representation, warranty or guarantee expressed or implied, is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use

of this information. Nothing herein shall be construed as a recommendation for uses which infringe valid patents or as extending a license under valid patents. This MSDS provides selected regulatory information on this product, including its components. This is not intended to include all regulations. It is the responsibility of the user to know and comply with all applicable rules, regulations and laws relating to the product being used.

Vertical lines in the left-hand margin indicate changes compared with the previous version.

16.2 Glossary of Terms:

ACGIH - American Conference of Governmental Industrial Hygienists

DOT - Department of Transportation

hPa - Hectopascals

mPa*s - Milli Pascal-Seconds

OSHA - Occupational Safety and Health Administration WHMIS - Canadian Workplace Hazardous Materials

PEL - Permissible Exposure Limit

Flash point determination methods

ASTM D56

ASTM D92, DIN 51376, ISO 2592

DIN 51755

ASTM D93. DIN 51758, ISO 2719 ASTM D3278, DIN 55680, ISO 3679 Сошнов ваме

Tagliabue (Tag) closed cup Cleveland open cup

TWA - Time Weighted Average

Identification System

Pensky-Martens closed cup Setaflash or Rapid closed cup

Abel-Pensky closed cup

ppm - Parts per Million

STEL - Short Term Exposure Limit

TSCA - Toxic Substances Control Act

SARA - Superfund Amendments and Reauthorization Act

16.3 Conversion table:

Pressure: 1 hPa * 0.75 = 1 mm Hg = 1 torr; 1 bar = 1000 hPa

Viscosity: 1 mPa*s = 1 centipoise (cP)