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SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1	Product identifier	
	Product Name / Product Number	MOLOTOW™ ONE4ALL™ MARKERS / MOLOTOW™ ONE4ALL™ REFILLS
	CAS No.	Mixture.
	EINECS No.	Mixture.
1.2	Relevant identified uses of the substance or mixture	
	and uses advised against	
	Identified Use(s)	Ink
	Uses Advised Against	None known.
1.3	Details of the supplier of the safety data sheet	
	Company Identification	Feuerstein GmbH - MOLOTOW Distribution
		Willy-Brandt-Straße 9/2, D-77933 Lahr/Schwarzwald
	Telephone	+49 - 7821-92229-0
	Fax	+49 - 7821-92229-99
	E-Mail (competent person)	info@molotow.com
1.4	Emergency telephone number	+49 - 7821-92229-0 [8:00 – 17:00 (UTC+1)].
	Languages spoken	German / English
SEC	TION 2: HAZARDS IDENTIFICATION	
2.1	Classification of the substance or mixture	

 2.1.1
 Regulation (EC) No. 1272/2008 (CLP)
 Not classified as hazardous

 2.2
 Label elements Product Name Hazard Pictogram(s) Signal Word(s) Hazard Statement(s) Precautionary Statement(s)
 None. None.

2.3 Other hazards

None known.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances Not applicable

3.2 Mixtures Substances in preparations / mixtures

EC Classification Regulation (EC) No. 1272/2008 (CLP)

Chemical identity of	%W/W	CAS No.	EC No.	REACH Registration No.	Hazard Statement(s)
the substance					
Ethyl alcohol	1.0 - 4.0	64-17-5	200-578-6	None assigned.	Flam.Liq.2: H225
Carbon black	9.0 - 10 (BLACK color only) < 0.5 (except BLACK color)	1333-86-4	215-609-9	None assigned.	Not classified
Titanium dioxide	< 30 (except BLACK color)	13463-67-7	236-675-5	None assigned.	Not classified
Ethylene glycol	< 3.0	107-21-1	203-473-3	None assigned.	Acute Tox.4: H302
Isopropyl alcohol	< 1.0	67-63-0	200-661-7	None assigned.	Flam.Liq.2: H225 Eye Irrit.2: H319
Water-soluble Resin	< 10	-	-	None assigned.	Not classified
Water	40 - 90	7732-18-5	231-791-2	-	Not classified

3.3 Additional Information

For full text of H/P phrases see section 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures Inhalation

Remove the victim to the fresh air area. If feel bad, see a doctor.

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4.2 4.3	Skin Contact Eye Contact Ingestion Expected acute symptom and late symptom Most important symptoms and effects, both acute and delayed Indication of any immediate medical attention and special treatment needed	Put off the all polluted clothes immediately. Clean with the proper temp. and slow flowing water for over 15 minutes. If have irritate the skin, see a doctor. Call a doctor if feel bad. Before re-use the put off clothes, clean it up and remove the pollution. Put off the contacts if possible, and continue to clean. Clean the eyes carefully for a few minutes. If the eyes get this product, clean the eyes immediately and wash away completely. If the cleaning eyes not enough, it may cause irreversible eye damage. If irritate to the eyes continue, see a doctor. Call a doctor, if feel bad. Rinse the mouth out. Do not have the victim vomit. Sialorrhea, face flash, cough, dizzy, lethargy, headache, sore throat, deliquim animi barf, vomition No data Rescuer must wear proper protective equipment according to the situation. Symptom will appear later, so that if the patient exposed excessively, it needs medical follow progress.
SECTI	ON 5: FIRE-FIGHTING MEASURES	
5.1	Extinguishing media Suitable Extinguishing Media Unsuitable extinguishing Media Special hazards arising from the substance or mixture	Small fire / Carbon dioxide, dry chemical extinguishing media, water spray, alcoholic resistance foam. Water spray, mist water, alcoholic resistance form. Cylindrical pouring water. The irritative, toxicity and corrosive gas is generated by fire. The container will be burst by heating. If it is not dangerous, move the container from the fire area. If it is impossible to move, cool the container and around by spraying water. After extinguishing a fire, cool the container completely by large quantity of
5.3	Advice for fire-fighters	water. For fighting fire, wear compressed air open-circuit SBCA and protect equipment for chemical. Fight a fire from up wind.
SECTI	ON 6: ACCIDENTAL RELEASE MEASURES	
6.1	Personal precautions, protective equipment and emergency procedures	The worker must wear proper protector (refer to section 8) not to get the paint on the skin or into eyes. Do not touch the leakage material or walk into it. Keep the proper distance in all direction as the leakage area immediately. No unauthorized entry. If leakage but not occur a fire, wear the occlusive and impervious protect wear. Stay in the wind. Move away from the low ground. Ventilate before enter the sealed area.
6.2	Environmental precautions	Prevent from influx into the drain ditch, sewer, basement and closed area.
6.3	Methods and material for containment and cleaning up Reference to other sections	Take notice not to affect the environment by discharge the paint into the river. Collect Neutralization: In small quantity case, absorb the leakage material by dry sand and nonflammable material or collect it in the sealed type container then dispose it. In small quantity case, collect the absorbed material by clean antistatic tools. In large quantity case, yard the leakage material by mound to prevent flow out and lead it into safety area then collect it. In large quantity case, water spray lower the steam temperature but it may not inhibit combustion at the sealed area. Containment or Depurant and Equipment: If it is not danger, stop the leakage. Ground all equipment which need for handle the leakage material. Use steam retard foam for lower the steam concentration. Precaution of Second Disaster:Clear away all ignition source immediately (Do not smoking near around, forbid firework and flame). In case large steam generating, retard it by mist spray. Call related agency and ask the help.
5.4		

SECTION 7: HANDLING AND STORAGE

Do the equipment measure described on the section 8 and wear protector.

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7.2	Conditions for safe storage, including any	Do the local exhaust ventilation and whole ventilation described on section 8. Prevent leakage the liquid and steam as possible. This product irritate the eyes so that care not to get it into the eyes. This product may cause sleep or vertigo, irritate the apparatus respiratorius and damage organ parts so that do not touch, inhale and swallow it. Do not fall, drop, shock or drag the container. Clean hands well after use this product. Use this product outside or well ventilated area only. Avoid touching, refer to the section10. Keep away from high temperature materials spark and fire, and avoid touching oxidizer and organic peroxide.
	incompatibilities Storage	Keep the container airtight and stock it in well ventilated place. Stock in the
		fulfilled and ventilated and cool place. Keep away from oxidant. Keep away
		from direct sunlight and fire. The inventory location must be fire-proof construction and the floor must be impermeable to prevent permeate the
		basement and spill to outside. Lock up the container.
		Dangerous goods if mixed: Refer to the section 10.
		Container material: Use the container regulated by fire law and UN transportation law.
7.3	Specific end use(s)	See Section: 1.2
7.5		

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 **Control parameters** 811 . .

0.1	Control parameters		
8.1.1	Occupational Exposure Limits		
	Name	ACGIH (TLV)	
	Ethyl alcohol	1000ppm	
	Carbon black	3.5mg/m ³	
	Titanium dioxide	10mg/m ³	
	Ethylene glycol	C 100mg/m ³ , Aeros	solonly
	Isopropyl alcohol	200ppm	
8.1.2	Biological limit value		No data
8.1.3	PNECs and DNELs		No data
8.2	Exposure controls		
8.2.1	Appropriate engineering contr	ols	Install the eye washing devices and safety shower where handle or stock this
			product.
8.2.2	Individual protection measure protective equipment (PPE)	s, such as personal	
			Wear proper respiratory protect equipment such as gas mask for organic gas
			(if high concentration, wear air-supplied respirator).
			Check the protect equipment regularly with check sheet.
	Eye/face protection Skin protection		Wear the eye protector designated by manufacturer. Wear the gloves designated by manufacturer.
	Skin protection		Wear protect boots, oil resistant apron (impermeable and antistatic) and
			protect clothes (antistatic) designated by manufacturer.
			Clean hands well after use this product.

8.2.3 **Environmental Exposure Controls**

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1	Information on basic physical and chemical properties		
	Appearance	Liquid	
	Odour	Odorless	
	Odour Threshold	No data	
	рН	No data	
	Melting Point/Freezing Point	No data	
	Initial boiling point and boiling range	Approx. 100°C	

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	Flash Point	62°C (Closed cup)
	Evaporation Rate	No data
	Flammability (solid, gas)	No data
	Upper/lower flammability or explosive limits	No data
	Vapour pressure	No data
	Vapour density	No data
	Relative density	No data
	Solubility(ies)	No data
	Partition coefficient: n-octanol/water	No data
	Auto-ignition temperature	No data
	Decomposition Temperature	No data
	Viscosity	No data
	Explosive properties	No data
	Oxidising properties	No data
9.2	Other information	
	Specific gravity (20°C)	1.08 - 1.25

SECTION 10: STABILITY AND REACTIVITY

10.1	Reactivity	No Data
10.2	Chemical stability	Under usually storage condition, it is stable.
10.3	Possibility of hazardous reactions	No Data
10.4	Conditions to avoid	No Data
10.5	Incompatible materials	No Data
10.6	Hazardous decomposition product(s)	Generates harmful gas such as carbon monoxide and carbon dioxide.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1	Information on toxicological ef	fects (Substance	es in preparations / mixtures)		
	Acute toxicity	•	Not Classified.		
	Ingestion		Not Classified.		
	Inhalation		Not Classified.		
	Skin Contact		Not Classified.		
	Skin corrosion/irritation		Not Classified.		
	Serious eye damage/irritation		Not Classified.		
	Respiratory or skin sensitization	on	Not Classified.		
	Germ cell mutagenicity		Not Classified.		
	Carcinogenicity		Not Classified.		
			Note: Regarding toxicological evaluation	on of carbon black, CLP opinion is that	
			even if adverse effects are seen in animal studies or in-vitro tests, no		
			classification is needed if the mechanis	sm or mode of action is not relevant to	
			humans (1.3.2.4.9.4 in GHS Part 1 Intr	oduction, UN2009). We decide to	
			classify this products as hazardous bas	sed on this opinion.	
	Reproductive toxicity		Not Classified.		
	STOT - single exposure		Not Classified.		
	STOT - repeated exposure		Not Classified.		
	Aspiration hazard		Not Classified.		
11.2	Other information				
	Name	IARC	OTHER		
	Ethyl alcohol	A4	LD50(oral, rat) 6200 - 15000mg/kg		
	Carbon blook	20	DEO(aral_rat) 1E400ma/ka		

Carbon black	2B	LD50(oral, rat) 15400mg/kg
Titanium dioxide	A4	LD50(oral, rat) > 10000mg/kg
Ethylene glycol	A4	LD50(oral, rat) 4000 - 10200mg/kg
Isopropyl alcohol	A4	LD50(oral, rat) 1870 - 5500mg/kg

SECTION 12: ECOLOGICAL INFORMATION

12.1 Toxicity

- 12.2 Persistence and degradability
- 12.3 Bioaccumulative potential

12.4 Mobility in soil

No data No data No data No data

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12.5	Results of PBT and VPVB assessment	No data	
12.6	Other adverse effects	None known.	
SECT	ION 13: DISPOSAL CONSIDERATIONS		

13.1 Waste treatment methods

Residue Waste:For dispose, follow the related regulation and standard of local governments. Ask the licensed industrial waste disposal company or local governments.

13.2 Additional Information

For Burning: Spray the incinerator with waste liquid directly or mix with flammable solvent in small quantity to burn. Activated sludge process. Polluted container and package: Clean the container and recycle or treat it in accordance with the related regulation or local governments. If dispose the container, remove the content completely.

SECTION 14: TRANSPORT INFORMATION

		ADR/RID	IMDG	IATA/ICAO
14.1	UN number	Not applicable.	Not applicable.	Not applicable.
14.2	UN proper shipping name	Not applicable.	Not applicable.	Not applicable.
14.3	Transport hazard class(es)	Not applicable.	Not applicable.	Not applicable.
14.4	Packing group	Not applicable.	Not applicable.	Not applicable.
14.5	Environmental hazards	Not applicable.	Not applicable.	Not applicable.
14.6	Special precautions for user	See Section: 2		
14.7	Transport in bulk according to Annex II of	Not applicable.	Not applicable.	Not applicable.
	MARPOL73/78 and the IBC Code			
14.8	Additional Information			

Common: Please follow the section7. Check if there are no leakage from container and take cargo without falling, dropping and damage. Land Transportation: In case of fall under the Fire Law, Industrial Safety and Health Law, Poisonous Material Control Law follow each relevant mode of transportation.

Marine Transportation: Please follow the Law for Safety of Vessel. Air Transportation: Please follow the Aviation Law and regulation of ICAO.

SECTION 15: REGULATORY INFORMATION

15.1	Safety, health and environmental regulations/legislation specific for the substance or mixture	Regulatory information with regard to this substance in your country or region should be examined by your own responsibility
15.1.1	EU regulations	
	Authorisations and/or Restrictions On Use	Not applicable.
	CoRAP Substance Evaluation	Not applicable.
15.1.2	National regulations	Outline of Hazardous Material Regulation in Japan.
	Japan	Industrial Safety and Health Law: Notice object goods (Article 57, section 2,
		Enforcement regulation 18-21, appendix 9.)
		Fire Law: N/A
		Law for Safety of Vessel: N/A
		Aviation Law: N/A
15.2	Chemical Safety Assessment	Not available.

SECTION 16: OTHER INFORMATION

The following sections contain revisions or new statements: 1-16.

References:

JPMA "Data Base for raw material SDS" JPMA "MSDS Guide Book [Mixture (for paint)]" 4th version JPMA "MSDS Guide Book [Mixture (for paint)]" 4th version-addenda version Solvent pocket book Raw material manufacturer SDS DFGOT (1996) IUCLID (2000)

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LEGEND

TLV	Threshold Limit Value
DNEL	Derived No Effect Level
PNEC	Predicted No Effect Concentration
PBT	Persistent, Bioaccumulative and Toxic
vPvB	very Persistent and very Toxic
Flam.Liq.2	Flammable liquid Category 2
Carc.2	Carcinogenicity Category 2
Acute Tox.4	Acute Toxicity - Oral Category 4
Eye Irrit.2	Eye Damage / Eye Irritation Category 2
H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed
H319	Causes serious eye irritation
H351	Suspected of causing cancer

Training advice: Consideration should be given to the work procedures involved and the potential extent of exposure as they may determine whether a higher level of protection is required.

Disclaimers

The description content of this data sheet is based on the documentation, information and data that we can garner at the present moment so that it might be change depend on new information. And it is recommend for usual handling so that in case of special handling, use it before take safety measure that suitable for your application and usage. The description content is information service and not certification.

Annex to the extended Safety Data Sheet (eSDS)

Not available.