

SAFETY DATA SHEET

Issue Date 23-July-2015 Revision Date Version 1

1. IDENTIFICATION

Product Identifier

Product Name JET ADJUSTER BRUSH CLEANER, THINNER

Other means of identification

SDS# 060 **UN/ID No** UN1247

Product Code 3201, 3206, 3299

Recommended use of the chemical and restrictions on use

Recommended Use With Jet Adjusters colors: Thinning liquids and cleaning brushes

Details of the supplier of the safety data sheet

Supplier Address Lang Dental Mfg. Co., Inc.

175 Messner Dr. Wheeling, IL 60090

USA

Emergency telephone number

Company Phone Number 847-215-6622

Emergency Telephone (INFOTRAC) 352-323-3500 (International)

800-535-5053 (North America)

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2. HAZARDS IDENTIFICATION

Classification

Flammable liquids	Category 2
Skin Corrosion / Irritation	Category 2
Skin Sensitization	Category 1
Specific Target Organ Toxicity - Single Exposure (Respiratory)	Category 3

Signal word Danger

Hazard statements H225 Highly flammable liquid and vapor.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.H335 May cause respiratory irritation.



Appearance Clear or slightly tinted Physical state Liquid Odor Acrid

Precautionary Statements - Prevention

P210 Keep away from heat/sparks/open flames/ hot surfaces. No smoking.

P233 Keep container tightly closed.

P240 Ground/bond container and receiving equipment.

P241 Use explosion-proof electrical/ventilating/lighting/equipment.

P242 Use only non-sparking tools.

P243 Take precautionary measures against static discharge.

P261 Avoid breathing dust/fume/gas/mist/vapors/spray.

P264 Wash hands thoroughly after handling.

P271 Use only outdoors or in a well-ventilated area.

P272 Contaminated work clothing should not be allowed out of the workplace.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

Precautionary Statements - Response

P303+P361+P353 IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

P362 Take off contaminated clothing and wash before use.

P370+P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant for extinction.

Precautionary Statements - Storage

P403+P233 Store in a well-ventilated place. Keep container tightly closed.

P403+P235 Store in a well-ventilated place. Keep cool.

Precautionary Statements - Disposal

P501 Dispose of contents/container in accordance with local with local regulation.

Hazardous component(s)

Contains methyl methacrylate.

for labeling

Hazards not otherwise classified (HNOC) Lachrymator.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight - %	Trade Secret
Methyl Methacrylate	80-62-6	< 100	*

^{*}Specific chemical weight has been withheld as a trade secret.

4. FIRST AID MEASURES

First aid measures

Inhalation Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a physician or poison

control center immediately.

Eye contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing

for at least 15 minutes. Call a physician immediately.

Ingestion Do NOT induce vomiting. Drink plenty of water or milk immediately. Never give anything by mouth to an

unconscious person. Provide an estimate of the time at which the material was ingested and the amount of

the substance that was swallowed. Call a physician or poison control center immediately.

Skin Contact Wash off immediately with plenty of soap and water. Take off contaminated clothing. Wash contaminated

clothing before reuse. If skin irritation or rash occurs, get medical advice/attention.

Most important symptoms and effects, both acute and delayed

Symptoms Exposed individuals may experience eye tearing, redness and discomfort. Contact may cause irritation and

redness. Prolonged exposure in poorly ventilated area may cause respiratory irritation.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptoms conventionally, after thorough decontamination.

5. FIRE-FIGHTING MEASURES

Extinguishing Media

Suitable: Chemical foam, carbon dioxide (CO₂), dry chemical

Unsuitable: Water spray

Specific hazards arising from the chemical

For bulk size >1L – High temperatures, inhibitor depletion, accidental impurities, or exposure to radiation or oxidizers may cause spontaneous polymerizing reaction generating heat/pressure. Closed containers may rupture or explode during a runaway polymerization. Use a water spray or fog to reduce or direct vapors. Extremely flammable. Vapors are heavier than air and may spread along the floors. Vapors may travel to source of ignition and flash back. Heat/impurities may cause pressure to build and/or rupture closed containers, spreading fire, increasing risk or burns/injuries.

Hazardous Combustion Products: Carbon oxides

Sensitivity to Mechanical Impact: No Sensitivity to Static Discharge: Yes

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Fight fire from a safe location.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal precautions ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area). Use

personal protective equipment as required. Ensure adequate ventilation. Remove any

contaminated clothing and wash thoroughly before reuse.

Environmental precautions Prevent product from entering drains. Spillages or uncontrolled discharges into watercourses must

be alerted to the appropriate regulatory body.

Methods and material for containment and clean-up

Method for containment Absorb with earth, sand or other non-combustible material and transfer to containers for later

disposal. DO NOT use combustible materials such as sawdust.

Method for clean-up Use only non-sparking tools. Wash all affected areas with plenty of warm water and soap.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on safe handling

Observe precautions found on the label. Keep containers closed when not in use. All equipment used when handling the product must be grounded. Use spark-proof tools and explosion-proof equipment. Avoid contact with skin, eyes and clothing. Use only in well-ventilated areas. Vapors are heavier than air and may travel along the floor and in the bottom of containers. Take precautionary measures against static discharges. Keep away from heat, sparks, open flames, and hot surfaces. NO SMOKING. Use personal protection recommended in Section 8. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Do not breathe dust, fume, gas, mist, vapor or spray.

Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place. Keep away from heat,

sparks, flame and other sources of ignition (i.e. pilot lights, electric motors and static electricity). Protect from direct sunlight. Keep container closed to prevent water absorption and contamination. Methacrylate stored in bulk must be kept in contact with air (oxygen). Keep at a temperature not

exceeding 25°C.

Packaging materials Keep in original container.

Incompatible materials Strong oxidizing agents, strong reducing agents, free-radical generators, inert gases, oxygen

scavengers

Material has strong solvent properties and can soften paint and rubber.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure guidelines

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. The following information is given as general guidance.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Methyl Methacrylate	STEL: 100 ppm	TWA:100 ppm	IDLH: 1000 ppm
80-62-6	TWA: 50 ppm	TWA: 410 mg/m ³	TWA: 100 ppm
		TWA:100 ppm (vacated)	TWA: 410 mg/m ³
		TWA: 410 mg/m ³ (vacated)	· ·

Appropriate engineering controls

Engineering controls Apply technical measures to comply with the occupational exposure limits.

Eyewash stations

Individual protection measures, such as personal protective equipment

Eye / face protection Depending on the use of this product, safety glasses or goggles may be worn. If necessary, refer to

US OSHA 29CFR SS1910.133, Canadian standards or the European Standard EN 166. Ensure

that an eyewash station, sink or washbasin is available in case of exposure to eyes.

Skin and body protection If anticipated that prolonged and repeated skin contact will occur during use of this product, wear

gloves for routine industrial use. If necessary, refer to US OSHA 29CFR SS1910.138 or the appropriate standards of Canada or the EC member states. Wear suitable protective clothing.

Respiratory protection Wear suitable respiratory equipment if exposure to levels above the occupational exposure limit is

likely. A suitable mask with filter type A may be appropriate. In the event of formation of particularly

high levels of vapor, a self-contained breathing apparatus may be appropriate.

General hygiene considerations Handle in accordance with good industrial hygiene and safety practice.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state Liquid Odor Acrid

Appearance Liquid Odor threshold Not determined

Color Clear

<u>Property</u> <u>Values</u> <u>Remarks / Method</u>

pH Not determined
Melting point / freezing point Not determined
Boiling point / boiling range 101°C / 214° F
Flash point 11.5°C / 52.7°F

Evaporation rate 3.1 Butyl acetate = 1

Flammability (solid, gas) n/a (liquid)

Flammability limits in air

Upper flammability limit 12.5% Lower flammability limit 2.12% Vapor pressure 28mm Hg

 Vapor pressure
 28mm Hg
 @ 20°C

 Vapor density
 3.5
 @15.5°C (Air = 1)

 Specific gravity
 0.949
 Water = 1

Specific gravity 0.949 Water solubility 1.6 wt% Solubility in other solvents Not determined Partition coefficient Not determined Autoignition temperature 421°C / 790°F **Decomposition temperature** Not determined Kinematic viscosity Not determined Dynamic viscosity Like water **Explosive properties** Not determined

Explosive properties Not determined Oxidizing properties Not determined

Other information

Density 0.949 g/mL

10. STABILITY AND REACTIVITY

Reactivity Not reactive under normal conditions

Chemical stability Unstable / reactive upon depletion of inhibitor

Possibility of hazardous reactions

None under normal processing

Hazardous polymerization Hazardous polymerization may occur. Monomer vapors are inhibited and may form polymers in vent or flame arresters, resulting in blockage of vents.

Conditions to avoid

Temperatures above 25°C (77°F), localized heat sources (e.g. drum or band heaters), oxidizing conditions, freezing conditions, direct sunlight, ultraviolet radiation, inert gas blanketing

Incompatible materials

Strong oxidizing agents, strong reducing agents, free-radical generators, inert gases, oxygen scavengers Material has strong solvent properties and can soften paint and rubber.

Hazardous decomposition products Carbon oxides

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposures

Product information

Inhalation Harmful if inhaled.

Eye contact Causes severe eye irritation.

Skin contact Causes skin irritation.

Ingestion May be harmful if swallowed.

Component information

Chemical Name	ORAL LD50	DERMAL LD50	INHALATION LC50
Methyl Methacrylate 80-62-6	> 7900 mg/kg (rat)	> 35,500 mg/kg (rabbit)	7094 ppm/4H (rat)

Information on physical, chemical and toxicological effects

Symptoms Contact may cause irritation and redness. Exposed individuals may experience eye tearing, redness and

discomfort. Prolonged exposure in poorly ventilated area may cause respiratory irritation.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Sensitization May cause allergic skin reaction.

Carcinogenicity Not classifiable as a human carcinogen

Chemical Name	ACGIH	IARC	NTP	OSHA
Methyl Methacrylate	-	Group 3	-	-
80-62-6				

IARC (International Agency for Research on Cancer)

Group 3 IARC components are "not classifiable as human carcinogens"

STOT – single exposure May cause respiratory irritation. May cause drowsiness or dizziness.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Chemical Name	Algae / aquatic plants	Fish	Toxicity to	Crustacea
			microorganisms	
Methyl	170: 96 h	125.5-190.7: 96 h Pimephales	-	69: 48 h Daphnia magna
Methacrylate	Psuedokirchneriella	promelas mg/L LC50 static;		mg/L EC50
80-62-6	subcapitata mg/L EC50			

Persistence and degradability Not readily biodegradable

Bioaccumulation Not determined

Mobility Potential for mobility in soil is very high.

Chemical Name	Partition coefficient
Methyl Methacrylate	0.7
80-62-6	

Other adverse effects COD = 88% (28 days), DOC removal > 95% (28 days)

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

Disposal of wastes Follow all local and national government regulations in disposing material or contaminated

packaging.

For U.S. - Dispose of in accordance with federal, state and local regulations. When discarded, it is considered a hazardous waste by the EPA under RCRA. The reportable quantity for methyl

methacrylate is 1000 lb. (40 CFR Part 302). Add excess inhibitor before disposing.

Contaminated Packaging Reuse of empty drums or containers is not recommended. Employees should be advised of the

potential hazards due to residual material associated with empty containers.

Dispose of all empty containers in accordance with local and national government regulations.

Chemical Name	RCRA	RCRA – Basis for Listing	RCRA – D Series Wastes	RCRA – U Series Wastes
Methyl Methacrylate 80-62-6	U162	Included in waste stream; F039	-	U162

Chemical Name	California Hazardous Waste Status
Methyl Methacrylate 80-62-6	Toxic Ignitable

14. TRANSPORTATION INFORMATION

<u>DOT</u>

UN / ID No	UN1247
Proper shipping name	Methyl methacrylate monomer, stabilized
Hazard Class	3
Packing Group	
Reportable Quantity (RQ)	1000 lb. (methyl methacrylate)

IATA

UN / ID No	UN1247
Proper shipping name	Methyl methacrylate monomer, stabilized
Hazard Class	3
Packing Group	

IMDG

UN / ID No	UN1247
Proper shipping name	Methyl methacrylate monomer, stabilized
Hazard Class	3
Packing Group	

15. REGULATORY INFORMATION

International Inventories

TSCA Listed United States Toxic Substances Control Act, Section 8(b) Inventory

DSL Listed Canadian Domestic Substances List

EINECS Listed European Inventory of Existing Chemical Substances

EU Regulations EC No. 1272/2008 (CLP) Classification, Labeling, Packaging

Medical Devices Directive 93/42/EEC - Class I Medical Devices

US Federal Regulations

Chemical Name	CAS	Weight %	SARA 313 Threshold Values %
Methyl Methacrylate	80-62-6	>95	1.0

SARA 311 / 312 Hazard Categories

Chemical Name	CWA – Reportable	CWA – Toxic	CWA – Priority	CWA – Hazardous
	Quantities	Pollutants	Pollutants	Substances
Methyl Methacrylate 80-62-6	1000 lb.	-	-	X

Chemical Name	Hazardous Substances	CERCLA /	Reportable Quantity (RQ)
	RQs	SARA RQ	Final
Methyl Methacrylate 80-62-6	1000 lb.	-	1000 lb. / 454 kg

US State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Methyl Methacrylate	X	X	X
80-62-6			

16. OTHER INFORMATION

NFPA	Health Hazards	Flammability	Instability
	2	3	2
HMIS	Health Hazards	Flammability	Physical Hazards
	2	3	2

Issue Date 23-July-2015

Revision Date Revision Note

Information to be updated in due course Hazard pictograms listed in this SDS to be added to product label.

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as guidance for safe handling, use, processing, storage, transportation, disposal and release. It is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet