

MATERIAL SAFETY DATA SHEET

(WASHER WITH SCREW)



SECTION 1. MATERIAL IDENTIFICATION

PRODUCT NAME

SCREW PLUG

MATERIAL

NYLON

MANUFACTURER'S NAME

SAKSHI INNOVATIONS PRIVATE LIMITED
Gurudwara Samasar Road,
P.O. Sahnewal, Village TIBBA, Distt. LUDHIANA-141 120 (INDIA)

SECTION 2. COMPOSITION

PRODUCT DEFINITION : Nylon (Polyamide) Within our present knowledge, this product does not contain any hazardous ingredients.

SECTION 3. HAZARDS IDENTIFICATION

This product is not classified as dangerous according to directive 67/548/EEC and its amendments.

SECTION 4. FIRST AID MEASURES

INHALATION : Not Respirable
SKIN CONTACT : Molten Nylon will cause thermal burn
EYE CONTACT : May be mechanical irritation only
INGESTION : Ingestion of this product is unlikely

SECTION 5. FIRE FIGHTING MEASURES

SUITABLE EXTINGUISHING MEDIA : In case of fire, use water spray (Fog), foam, dry chemical or Co².
SPECIAL EXPOSURE HAZARDS : No special fire or explosion hazard. Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire.
HAZARDOUS COMBUSTION PRODUCTS : Decomposition products may include the following materials.
(i.) Carbon oxides
(ii.) Nitrogen oxides
SPECIAL PROTECTIVE : Fire fighters should wear appropriate equipments and self
ENVIRONMENT FOR FIRE FIGHTERS : Contained breathing apparatus (SCBA) with full face-piece Operated in positive pressure mode

SECTION 6. ACCIDENTAL RELEASE MEASURES

PERSONAL PRECAUTION : No special precaution is required.
ENVIRONMENTAL PROTECTION : No special measures required.

SECTION 7. HANDELING & STORAGE

HANDLING : Providing good ventilation and/or local exhaust systems are used.
STORE : Store in a dry place
PACKAGING MATERIALS RECOMMENDED : Use original container

SECTION 8. EXPOSURE CONTROLS/ PERSONAL PROTECTIONS

RISK MANAGEMENT MEASURES / OCCUPATIONAL EXPOSURE CONTROLS

TECHNICAL MEASURES : Use process enclosures, local exhaust ventilation or other engineering controls to keep air borne levels below recommended exposure limits. If user operations generate dust, fumes or mist, use ventilation to keep exposure to airborne contaminants below the exposure limits
PERSONAL PROTECTION MEASURES
RESPIRATORY PROTECTION : In case of dust formation use respiratory equipment with filter type particle filter P1 according to DIN EN 143.
HAND PROTECTION : Use protective gloves of leather. Contaminated or damaged gloves should be replaced.
EYE PROTECTION : Use protective goggles with side shields or tightly fitting
SKIN PROTECTION : Skin covering working clothes, wear dust proof overalls if large quantity of dust is generated.
HYGIENE MEASURES : Wash hands, forehands and face thoroughly after handling products before eating, smoking or using the lavatory and at the end of the working period. Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eye wash stations and safety showers are close to the workstation location
ENVIRONMENTAL EXPOSURE CONTROLS
TECHNICAL MEASURES : Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

SECTION 9. PHYSICAL & CHEMICAL PROPERTIES

PHYSICAL STATE : VELCRO
COLOUR : As per customer's requirement
ODOUR : Odourless
COLOUR : As per customer's requirement
MELTING POINT : 220°C (431.6°F)
FLASH POINT : Closed cup: > 400°C (>752°F)
SPECIFIC GRAVITY : 1.14
SOLUBILITY : Insoluble in water
IGNITION TEMPERATURE : > 400°C

SECTION 10. REACTIVITY AND STABILITY

STABILITY : This Product is stable
POSSIBILITY OF HAZARDOUS REACTION : Under normal conditions of storage and use, hazardous reactions will not occur
DECOMPOSITION TEMPERATURE : > 350°C
HAZARDOUS DECOMPOSITION PRODUCT : Caused by smouldering and incomplete combustion toxic fumes mainly consisting of Co, Co2 and nitrogen oxides. Degradation products of the polymers and their additives may also be formed

SECTION 11. TOXICOLOGICAL INFORMATION

According to our experience and information the product has no harmful effects on health if properly handled.

SECTION 12. ECHOLOGICAL INFORMATION

The product is practically insoluble in water. In views of its consistency and insolubility in water, no ecological Problems are to be expected if the product is properly handled. This product is not readily biodegradable

SECTION 13. DISPOSAL CONSIDERATIONS

METHODS OF DISPOSAL : The product is suitable for mechanical recycling. After appropriate treatment it can be re-melted and reprocessed into new molded articles. Mechanical recycling is only possible if the material has been selectively retrieved and carefully segregated according to type otherwise may only be transported to suitable incinerator with reduced non air emissions observing local official regulations. May be disposed of together with house hold refuse if local official regulations are observed
HAZARDOUS WASTE : Within our present knowledge this product is not regarded as hazardous waste as defined by EU Directive 91/689/EEC

SECTION 14. TRANSPORT INFORMATION

Not regulated
Not Dangerous. Cargo keep dry.

SECTION 15. REGULATORY INFORMATION

EU REGULATIONS : Classification and labelling have been determined according to EU Directives 67/548/EEC and 1999/45/EC (Including amendments) and take into account the intended product use
RISK PHRASES : This product is not classified according to EU Legislation

SECTION 16. OTHER INFORMATION

This data is based on our current knowledge and experience. The purpose of this Safety Data Sheet is to describe the products in terms of their safety requirements. The above details do not imply any guarantee Concerning composition, properties or performance of the product.
REACH DECLARATION
Product is in compliance with substance of Very High Concern (SVHC) i.e. ≤ 0.1 %w/w as per the candidate list promulgated by the European Chemicals Agency (ECHA) which are defined in Article 57 of REACH Regulation (EC1907/2006) checked by Tuv-Nord Group

TECHNICAL DATA SHEET

(WASHER)

SECTION 1. MATERIAL IDENTIFICATION

PRODUCT DESCRIPTION

WASHER

SECTION 2. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Composition	CAS No.	% Weight
■ Carbon	7440-44-0	0.030
■ Chromium	7440-47-3	0.0063
■ Iron	7439-89-6	0.0071
■ Manganese	7439-96-5	0.0011
■ Phosphorus	7723-14-0	0.0008
■ Silicon	7440-21-3	0.0071
■ Sulphur	7704-34-9	0.0018
■ Nickel	7440-02-0	0.0073
■ Molybdenum	7439-98-7	0.0016
■ Aluminium	7429-90-5	0.0003
■ Cobalt	7440-48-4	0.023
■ Copper	7440-50-8	0.0030
■ Niobium	7440-03-1	0.0003
■ Titanium	7440-32-6	0.0012
■ Vanadium	7440-62-2	0.0082
■ Tungsten	7440-33-7	99.57
■ Tin	7440-31-5	0.244
■ Nitrogen	7727-37-9	0.015
■ Arsenic	7440-38-2	0.022
■ Boron	7440-42-8	0.0034
■ Cerium	7440-45-1	0.0071
■ Lead	7439-92-1	0.0029
■ Magnesium	7439-95-4	0.040
■ Calcium	7440-70-2	0.0031

SECTION 3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW : This formed solid metal product poses little or no immediate health or fire hazard. When product is subjected to welding, burning, melting, sawing, brazing, grinding, or other similar processes, potentially hazardous airborne particulate and fumes may be generated. Avoid inhalation of metal dusts and fumes. Operations having the potential to generate airborne particulates should be performed in well ventilated areas and, if appropriate, respiratory protection and other personal protective equipment should be used.
POTENTIAL HEALTH EFFECTS : Primary Entry Routes: Inhalation and skin, if coated. Steel products in the natural state do not present an inhalation, ingestion or contact hazard. However, operations such as burning, welding, sawing, brazing, machining and grinding may result in the following effects if exposures exceed recommended limits.
TARGET ORGANS : Respiratory system
ACUTE EFFECTS
INHALATION : Excessive exposure to high concentrations of dust may cause irritation to the eyes, skin and mucous membranes of the upper respiratory tract.
EYE : Excessive exposure to high concentrations of dust may cause irritation to the eyes
SKIN : Skin contact with dusts may cause irritation or sensitization, possibly leading to dermatitis
INGESTION : Ingestion of harmful amounts of this product as distributed is unlikely due to its solid insoluble form. Ingestion of dust may cause nausea and/or vomiting.
CHRONIC EFFECTS : Chronic inhalation of metallic fumes and dusts are associated with the following conditions
IRON OXIDE : Chronic inhalation of excessive concentrations of iron oxide fumes or dusts may result in the development of a benign pneumoconiosis, called siderosis, which is observable as an X-ray change. No physical impairment of lung function has been associated with siderosis.
CALCIUM : Depending on the concentration and duration of exposure, repeated or prolonged inhalation may cause inflammation of the respiratory passages, ulcers of the mucous membranes, and possible perforation of the nasal septum. Repeated or prolonged skin contact may cause dermatitis.
CARBON : Chronic inhalation of high concentrations to carbon may cause pulmonary disorders
COPPER : Skin contact with dusts may cause irritation or sensitization, possibly leading to dermatitis. Repeated or prolonged contact with surface treatments or oil residue may cause skin irritation, dermatitis, ulceration or allergic reactions in sensitized individuals.
MANGANESE : Chronic exposure to high concentrations of manganese fumes and dusts may adversely affect the central nervous system with symptoms including languor, sleepiness, weakness, emotional disturbances, spastic gait, mask-like facial expression and paralysis. Animal studies indicate that manganese exposure may increase susceptibility to bacterial and viral infections.
PHOSPHORUS : Inhalation of dusts and fumes of ferrophosphorus and phosphorus oxides may cause respiratory irritation.
SILICON : Silicon dusts are a low health risk by inhalation and should be treated as a nuisance dust.
SULFUR : Sulfur compounds present in the fumes, may irritate the skin, eyes, lungs and gastrointestinal tract.
ALUMINIUM : Aluminium dusts/fines are a low health risk by inhalation and should be treated as a nuisance dust.
LEAD : Lead is classified among the highly toxic heavy metals. It is a cumulative hazard (accumulates in the bone and body tissue) and is a systemic poison that may affect a variety of organ systems, including the central nervous system, kidneys, reproductive system, blood formation, and gastrointestinal tract
ZINC : Latent liver dysfunction and gastrointestinal disturbances with pressure in the stomach region, nausea, and weakness have been reported from repeated inhalation of zinc oxide.
CHEMICAL SURFACE TREATMENTS/COATINGS : The possible presence of chemical surface treatments and oil coatings should be considered when evaluating potential employee health hazards and exposures during handling and welding or other fume activities. Removal of surface coatings should be considered prior to such activities
MEDICAL CONDITIONS AGGRAVATED BY LONG-TERM EXPOSURE : Individuals with chronic respiratory disorders (i.e., asthma, chronic bronchitis, emphysema, etc.) may be adversely affected by any fume or airborne particulate matter exposure. SARA Potential Hazard Categories: Immediate Acute Health Hazard; Delayed Chronic Health Hazard.

SECTION 4. FIRST AID MEASURES

INHALATION : For over-exposure to airborne fumes and particulate, remove exposed person to fresh air. If breathing is difficult or has stopped, administer artificial respiration or oxygen as indicated. Seek medical attention promptly. Metal fume fever may be treated by bed rest, and administering a pain and fever reducing medication.
EYE CONTACT : Flush with large amounts of clean water to remove particles. Seek medical attention if irritation persists.
SKIN CONTACT : Remove contaminated clothing. Wash affected areas with soap or mild detergent and water. If thermal burn has occurred, flush area with cold water and seek medical attention. If a persistent rash or irritation occurs, seek medical attention
INGESTION : Not a probable route of industrial exposure. However, if ingested, seek medical attention immediately

SECTION 5. FIRE FIGHTING MEASURES

FLAMMABILITY CLASSIFICATION : Non-flammable, non-combustible
EXTINGUISHING MEDIA : Not applicable for solid product. Use extinguishers appropriate for surrounding materials
UNUSUAL FIRE OR EXPLOSION HAZARDS : Not applicable for solid product. Do not use water on molten metal.
HAZARDOUS COMBUSTION PRODUCTS : At temperatures above the melting point, fumes containing metal oxides and other alloying elements may be liberated.
FIRE-FIGHTING INSTRUCTIONS : Do not release runoff from fire control methods to sewers or waterways
FIRE-FIGHTING EQUIPMENT : Wear a self-contained breathing apparatus (SCBA) with a full facepiece operated in pressure-demand or positive-pressure mode and full protective clothing.

SECTION 6. ACCIDENTAL RELEASE MEASURES

SPILL/LEAK PROCEDURES : Not applicable to steel in solid state. For spills involving finely divided particles, clean-up personnel should be protected against contact with eyes and skin. If material is in a dry state, avoid inhalation of dust. Fine, dry material should be removed by vacuuming or wet sweeping methods to prevent spreading of dust. Avoid using compressed air. Do not release into sewers or waterways. Collect material in appropriate, labeled containers for recovery or disposal in accordance with federal, state, and local regulations.
REGULATORY REQUIREMENTS : Follow applicable OSHA regulations (29 CFR 1910.120) and all other pertinent state and federal requirements.
DISPOSAL : Contact your supplier or a licensed contractor for detailed recommendations. Follow applicable federal, state, and local regulations

SECTION 7. HANDELING & STORAGE

HANDLING PRECAUTIONS : Operations with the potential for generating high concentrations of airborne particulates should be evaluated and controlled as necessary. Practice good housekeeping. Avoid breathing metal fume and/or dust.
STORAGE REQUIREMENTS : Store away from acids and incompatible materials

SECTION 8. EXPOSURE CONTROLS/ PERSONAL PROTECTIONS

ENGINEERING CONTROLS : Use controls as appropriate to minimize exposure to metal fumes and dusts during handling operations.
VENTILATION : Provide general or local exhaust ventilation systems to minimize airborne concentrations. Local exhaust ventilation is preferred because it prevents contamination dispersion into the work area by controlling it at its source.
ADMINISTRATIVE CONTROLS : Do not use compressed air to clean-up spills
RESPIRATORY PROTECTION : Seek professional advice prior to respirator selection and use. Follow OSHA respirator regulations (29 CFR 1910.134) and, if necessary, wear a NIOSH-approved respirator. Select respirator based on its suitability to provide adequate worker protection for given working conditions, level of airborne contamination, and presence of sufficient oxygen.
PROTECTIVE CLOTHING/EQUIPMENT : For operations which result in elevating the temperature of the product to or above its melting point or result in the generation of airborne particulates, use protective clothing, gloves and safety glasses or goggles as required for welding, burning, sawing, brazing, grinding or machining operations. Protective gloves should be worn as required for welding, burning or handling operations. Where the surface treatments are applied to the product, wear gloves when handling. Do not continue to use gloves or work clothing that has become saturated or soaked through with oil coating. Wash skin that has been exposed to oil with soap and water or waterless hand cleaner.

SECTION 9. PHYSICAL & CHEMICAL PROPERTIES

DENSITY/G/CM3 : 7.70
HARDNESS (HV1) : 180

SECTION 10. REACTIVITY AND STABILITY

STABILITY : Steel products are stable under normal storage and handling conditions
POLYMERIZATION : Hazardous polymerization cannot occur
CHEMICAL INCOMPATIBILITIES : Will react with strong acids to form hydrogen. Iron oxide dusts in contact with calcium hypochlorite evolve oxygen and may cause an explosion.
CONDITIONS TO AVOID : Storage with strong acids or calcium hypochlorite
HAZARDOUS DECOMPOSITION PRODUCTS : Thermal oxidative decomposition of galvanized steel products can produce fumes containing oxides or zinc, iron and manganese as well as other elements.

SECTION 11. TOXICOLOGICAL INFORMATION

The possible presence of chemical surface treatment and coatings should be considered when evaluating potential employee health hazards and exposures during handling and welding or other fume generating activities
EYE EFFECTS : Eye contact with the individual components may cause particulate irritation. Implantation of iron particles in guinea pig corneas has resulted in rust rings with corneal softening about rust ring. Repeated or prolonged eye contact with zinc oxide fume may produce conjunctivitis.
SKIN EFFECTS : Skin contact with the individual dust components may cause physical abrasion, irritation and dermatitis
ACUTE INHALATION EFFECTS : Inhalation of the individual alloy components has been shown to cause various respiratory effects.
ACUTE ORAL EFFECTS : No data available.
CARCINOGENICITY : Lead; Chromium (in surface passivation treatment, if specified).
MUTAGENICITY : No data available
TERATOGENICITY : No data available

SECTION 12. ECHOLOGICAL INFORMATION

ECOTOXICITY : No data available for galvanized steel as a whole. However, individual components have been found to be toxic to the environment. Metal dusts may migrate into soil and groundwater and be ingested by wildlife. Lead can be bioaccumulated in plants and water organisms, especially shellfish
ENVIRONMENTAL FATE : No data available.
ENVIRONMENTAL DEGRADATION : No data available.
SOIL ABSORPTION/MOBILITY : No data available for galvanized steel as a whole. However, individual components have been found to be absorbed by plants from soil.

SECTION 13. DISPOSAL CONSIDERATIONS

DISPOSAL : Steel scrap should be recycled whenever possible. Product dusts and fumes from processing operations should also be recycled, or classified by a competent environmental professional and disposed of in accordance with applicable Federal, state or local regulations.
CONTAINER CLEANING AND DISPOSAL : Follow applicable Federal, state or local regulations. Observe safe handling precautions.

SECTION 14. TRANSPORT INFORMATION

Galvanized steel is not listed as a hazardous substance for any mode of transportation.

SECTION 15. REGULATORY INFORMATION

OSHA REGULATIONS : The product as a whole is not listed. However, individual components of the product are listed.

SECTION 16. OTHER INFORMATION

The information provided herein is compiled by SAKSHI INNOVATIONS to be accurate from sources believed to be reliable, but it is the responsibility of the user to investigate and understand other pertinent sources of information to comply with all laws and procedures applicable to the safe handling and use of this product, and to determine the suitability of the product for its intended use. SAKSHI INNOVATIONS makes no warranty, express or implied, concerning the product or the merchantability or fitness thereof for any purpose or concerning the accuracy of any information provided.