REVISION DATE 24.07.2015

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

1.1. Product identifier

Product name	ROKET PLASTIC GLUE
Product No.	AD62
Synonyms, Trade Names	DIETHYLENE GLYCOL DIETHYL ETHER, bis (2-ETHOXY-ETHYL) ETHER, DIETHYL CARBITOL
REACH Registration number	05-2117229096-45
REACH Registration notes	THIS CHEMICAL IS TO BE REGISTERED IN 2018
CAS-No.	112-36-7
EC No.	203-963-7

1.2. Relevant identified uses of the substance or mixture and uses advised against

Identified uses Manufacture of substance Distribution of substance Formulation & (re)packing of substances and mixtures Uses in coatings Uses in cleaning agents Use as an intermediate

1.3. Details of the supplier of the safety data sheet

Deluxe Materials Ltd	
Unit 13, Cufaude Business Park	
Cufaude Lane, Bramley, Tadley	
Hampshire RG26 5DL United Kingdom	
Tel: +44 (0) 1256 883 944	
info@deluxematerials.com	

1.4. Emergency telephone number +44 (0) 1256 883 944 office hours only

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (EC 1272/2008)

Classification (67/548/EEC)

Physical and Chemical Hazards	Not classified.
Human health	Eye Irrit. 2 - H319
Environment	Not classified.
Xi:R36.	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16. Human health

May irritate eyes. Splashes may cause serious eye damage. May cause minor irritation on skin contact. Vapours/aerosol spray may irritate the respiratory system. In high concentrations, vapours and spray mists are narcotic and may cause headache, fatigue, dizziness and nausea.

Environment

Not considered as an environmental hazard according to CLP criteria Physical and Chemical Hazards

Not considered as a physical hazard under CLP criteria

2.2. Label elements

EC No.	203-963-7
Label In Accordance With (EC) No.	1272/2008

REVISION DATE 24.07.2015

PAGE 2 TO 8

Signal Word	Warning	
Hazard Statements		
	H319	Causes serious eye irritation.
Precautionary Statements		
	P305+351+338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
	P313	Get medical advice/attention.
Supplementary Precautionary	y Statements	
	P280	Wear protective gloves/protective clothing/eye protection/face protection.
	P264	Wash contaminated skin thoroughly after handling.
	P337	If eye irritation persists:

2.3. Other hazards

Not Classified as PBT/vPvB by current EU criteria.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1. Substances

Product name	ROKET PLASTIC GLUE
REACH Registration number	05-2117229096-45
REACH Registration notes	THIS CHEMICAL IS TO BE REGISTERED IN 2018
CAS-No.	112-36-7
EC No.	203-963-7
Gross Formula	C8H18O3

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

General information

Get medical attention if any discomfort continues. Inhalation

In case of inhalation of spray mist: Move person into fresh air and keep at rest. Get medical attention if any discomfort continues. If respiratory problems, artificial respiration/oxygen. When breathing is difficult, properly trained personnel may assist affected person by administering oxygen.

Ingestion

Rinse mouth thoroughly. Do not induce vomiting. If vomiting occurs, the head should be kept low so that stomach vomit doesn't enter the lungs. Consult a physician for specific advice.

Skin contact

Remove contaminated clothing immediately and wash skin with soap and water. Get medical attention if irritation persists after washing. Eye contact

Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention if any discomfort continues.

4.2. Most important symptoms and effects, both acute and delayed

General information

If adverse symptoms develop as described the casualty should be transferred to hospital as soon as possible.

Inhalation

Vapours may cause headache, fatigue, dizziness and nausea.

Ingestion

May cause stomach pain or vomiting. Diarrhoea. May cause nausea, headache, dizziness and intoxication.

Skin contact

Prolonged contact may cause redness, irritation and dry skin.

Eye contact

Irritating and may cause redness and pain.

4.3. Indication of any immediate medical attention and special treatment needed

REVISION DATE 24.07.2015

PAGE 3 TO 8

No recommendation given, but first aid may still be required in case of accidental exposure, inhalation or ingestion of this chemical. If in doubt, GET MEDICAL ATTENTION PROMPTLY!

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Not classified as flammable, however product is combustible Use: Water spray, fog or mist. Alcohol resistant foam. Carbon dioxide (CO2). Dry chemicals, sand, dolomite etc.

Unsuitable extinguishing media

Nonalcohol resistant foam Do not use water jet as an extinguisher, as this will spread the fire.

5.2. Special hazards arising from the substance or mixture

Hazardous combustion products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

Unusual Fire & Explosion Hazards

Heat may cause the containers to explode. Solvent vapours may form explosive mixtures with air. May travel considerable distance to source of ignition and flash back. May ignite at high temperature. Vapours are heavier than air and may spread near ground to sources of ignition.

Specific hazards

When heated and in case of fire, toxic vapours/gases may be formed.

5.3. Advice for firefighters

Special Fire Fighting Procedures

Move container from fire area if it can be done without risk. Containers close to fire should be removed or cooled with water. Cool containers exposed to flames with water until well after the fire is out. Keep run-off water out of sewers and water sources. Dike for water control. If risk of water pollution occurs, notify appropriate authorities. For massive fire in cargo area, use unmanned hose holder or monitor nozzles, if possible. If not, withdraw and let fire burn out.

Protective equipment for fire-fighters

Self contained breathing apparatus and full protective clothing must be worn in case of fire.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid inhalation of vapours and contact with skin and eyes. Eliminate all ignition sources Follow precautions for safe handling described in this safety data sheet. Wear protective clothing as described in Section 8 of this safety data sheet. In case of inadequate ventilation, use respiratory protection. Take precautionary measures against static discharges. In case of spills, beware of slippery floors and surfaces.

6.2. Environmental precautions

Do not allow to enter drains, sewers or watercourses. Do not allow ANY environmental contamination. Spillages or uncontrolled discharges into watercourses must be IMMEDIATELY alerted to the Environmental Agency or other appropriate regulatory body. To prevent release, place container with damaged side up. Contain spillages with sand, earth or any suitable adsorbent material. Collect and dispose of spillage as indicated in section 13.

6.3. Methods and material for containment and cleaning up

Ventilate well, stop flow of gas or liquid if possible. Remove ignition sources. Do not allow chemical to enter confined spaces such as sewers due to explosion risk. Sewers designed to preclude formation of explosive concentrations of vapour may be permitted. Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Remove sources of ignition. Stop leak if possible without risk. Small Spillages: Let evaporate. Keep out of confined spaces because of explosion risk. Large Spillages: Dam and absorb spillages with sand, earth or other non-combustible material. Shovel into dry containers. Cover and move the containers. Flush the area with water. Should be prevented from entering drains. Runoff or release to sewer, waterway or ground is forbidden. Containers with collected spillage must be properly labelled with correct contents and hazard symbol. Ensure that waste and contaminated materials are collected and removed from the work area as soon as possible in a suitably labelled container. Spillage may be stored as chemical waste in approved area. When dealing with a spillage, please consult the section relating to suitable protective measures. Clean-up personnel should use respiratory and/or liquid contact protection. Wash thoroughly after dealing with a spillage.

6.4. Reference to other sections

Wear protective clothing as described in Section 8 of this safety data sheet. See section 11 for additional information on health hazards. Collect and dispose of spillage as indicated in section 13.

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

REVISION DATE 24.07.2015

PAGE 4 TO 8

Keep away from heat, sparks and open flame. Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level. Avoid acids, moisture, and combustible materials. Wear full protective clothing for prolonged exposure and/or high concentrations. Do not use in confined spaces without adequate ventilation and/or respirator. Use explosion proof electric equipment. Do not handle broken packages without protective equipment. Good personal hygiene is necessary. Wash hands and contaminated areas with water and soap before leaving the work site. Avoid eating, drinking and smoking when using the product.

7.2. Conditions for safe storage, including any incompatibilities

Flammable/combustible - Keep away from oxidisers, heat and flames. Do not store near heat sources or expose to high temperatures. Protect from light, including direct sunrays. Prolonged contact with air may cause formation of explosive peroxides. May attack some plastics, rubber and coatings. Keep away from food, drink and animal feeding stuffs. Storage Class

Chemical storage.

7.3. Specific end use(s)

The identified uses for this product are detailed in Section 1.2.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

No DNEL value has been established No PNEC values have been established

8.2. Exposure controls

Protective equipment







Use engineering controls to reduce air contamination to permissible exposure level. Provide eyewash station.

Engineering measures

If enclosed handling cannot be guaranteed, ventilation and protective clothing must be used. Provide adequate ventilation, including appropriate local extraction, to ensure that the defined occupational exposure limit is not exceeded. All handling to take place in well-ventilated area. Explosion-proof general and local exhaust ventilation.

Respiratory equipment

If ventilation is insufficient, suitable respiratory protection must be provided. At work in confined or poorly ventilated spaces, respiratory protection with air supply must be used. Seek advice from supervisor on the companies' respiratory protection standards. Supplied-air respirator with full facepiece, helmet or hood. Chemical respirator with specific cartridge providing protection against the compound of concern. Change filters frequently. Consult instructions before use. Check that mask fits tight and change filter regularly. When spraying use suitable air-supplied respirator.

Hand protection

Protective gloves should be used if there is a risk of direct contact or splash. Use protective gloves made of: Butyl rubber. Polyethylene. Viton rubber (fluor rubber). The most suitable glove must be chosen in consultation with the gloves supplier, who can inform about the breakthrough time of the glove material. Use suitable protective gloves if risk of skin contact. Eye protection

Wear approved chemical safety goggles where eye exposure is reasonably probable.

Other Protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact. Provide eyewash station. Hygiene measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke. Skin protection

Wear apron or protective clothing in case of contact.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Colourless.
Odour	Ether
Solubility	Soluble in water. Soluble in: Organic solvents

REVISION DATE 24.07.2015

Initial boiling point and boiling range	189'C 1013 hPa
(°C) Melting point (°C)	- 44.3'C
Relative density	0.907 @ 20'C
Vapour density (air=1)	5.6
Vapour pressure	500 Pa 20'C
Viscosity	1.4 mPas 20'C
Flash point (°C)	90'C CC (Closed cup).
Auto Ignition Temperature (°C)	213'C
Partition Coefficient	log Kow
(N-Octanol/Water)	0.39
9.2. Other information	
Refractive Index	1.412
Mol Weight	162 22

 Mol. Weight
 162.22

 Volatile By Vol. (%)
 100 %

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

Reaction with: Acids. Oxidising materials.

10.2. Chemical stability

Stable under normal temperature conditions and recommended use. Contact with air and light may form explosive peroxides.

10.3. Possibility of hazardous reactions

Reacts with strong oxidising agents Hazardous Polymerisation Not relevant Polymerisation Description Not relevant

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition. Avoid contact with strong oxidisers. Avoid contact with acids and alkalis.

10.5. Incompatible materials

Materials To Avoid Strong oxidising substances. Strong acids.

10.6. Hazardous decomposition products

Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Toxicological information Information given is based on product testing

Acute toxicity: Acute Toxicity (Oral LD50) 3674 mg/kg Mouse Low toxicity

Acute Toxicity (Dermal LD50) 6030 mg/kg Rabbit Low toxicity

REVISION DATE 24.07.2015

Skin Corrosion/Irritation: Not irritating to skin

<u>Serious eye damage/irritation:</u> Irritating

Respiratory or skin sensitisation: Not Sensitising.

<u>Carcinogenicity:</u> This substance has no evidence of carcinogenic properties.

<u>Reproductive Toxicity:</u> This substance has no evidence of toxicity to reproduction.

General information

Prolonged and repeated contact with solvents over a long period may lead to permanent health problems.

Inhalation

High concentrations of vapours may irritate respiratory system and lead to headache, fatigue, nausea and vomiting. Contains organic solvents which in case of overexposure may depress the central nervous system causing dizziness and intoxication.

Ingestion

May irritate and cause stomach pain, vomiting and diarrhoea. Irritating. May be absorbed in the body and cause dizziness, nausea and vomiting. Aspiration into the lungs when swallowed or vomited may cause chemical pneumonitis which can be fatal

Skin contact

Prolonged and frequent contact may cause redness and irritation.

Eye contact Irritating and may cause redness and pain. Risk of serious damage to eyes.

Route of entry Inhalation. Ingestion.

Target Organs Eyes

Medical Symptoms

No specific symptoms noted, but this chemical may still have adverse health impact, either in general or on certain individuals. High concentrations of vapours may irritate respiratory system and lead to headache, fatigue, nausea and vomiting. Ingestion may cause: Gastrointestinal symptoms, including upset stomach. Nausea, vomiting. Drowsiness, dizziness, disorientation, vertigo. Skin contact may cause: Dry skin. Skin irritation. Eye contact may cause: Irritation, burning, lachrymation, blurred vision after liquid splash. Medical Considerations

Skin disorders and allergies. Splash in eye requires examination by eye specialist.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

The product components are not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

12.1. Toxicity

Acute Toxicity - Fish LC50 96 hours > 10000 mg/l Pimephales promelas (Fat-head Minnow) Practically non toxic Acute Toxicity - Aquatic Invertebrates EC50 96 hours 6600 mg/l Freshwater invertebrates Acute Toxicity - Aquatic Plants Not available. PAGE 6 TO 8

REVISION DATE 24.07.2015

12.2. Persistence and degradability

Degradability The product is not readily biodegradable.

12.3. Bioaccumulative potential

Bioaccumulative potential Does not bioaccumulate significantly Partition coefficient log Kow 0.39

12.4. Mobility in soil

Mobility:

The product is water soluble and may spread in water systems. If product enters soil it will be mobile and may contaminate groundwater.

12.5. Results of PBT and vPvB assessment

This product does not contain any PBT or vPvB substances.

12.6. Other adverse effects

The product contains substances which contribute to global warming (greenhouse effect).

SECTION 13: DISPOSAL CONSIDERATIONS

General information

Waste to be treated as controlled waste. Disposal to licensed waste disposal site in accordance with local Waste Disposal Authority. Contaminated packages must be completely emptied before sending away for laundering and re-use Waste, residue, empty containers, discarded work clothes and used disposable towels must be collected in designated receptacles, labelled with content. When handling waste, consideration should be made to the safety precautions applying to handling of the product.

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements. Confirm disposal procedures with environmental engineer and local regulations. Do not allow runoff to sewer, waterway or ground. Contact specialist disposal companies.

SECTION 14: TRANSPORT INFORMATION

General

Not classified as hazardous for conveyance

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Not applicable.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

14.6. Special precautions for user

Not applicable.

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

Not listed

REVISION DATE 24.07.2015

SECTION 15: REGULATORY INFORMATION

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

Environmental Listing

Environmental Protection Act 1990 Hazardous Waste Regulations 2005

Guidance Notes

Workplace Exposure Limits EH40. Introduction to Local Exhaust Ventilation HS(G)37.

EU Legislation

Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments.

National Regulations

Health and Safety at Work Act (As Amended) 1974 Control of Substances Hazardous to Health Regulations 2002 (as amended) The Carriage of Dangerous Goods and Use of Transportable Pressure Equipment Regulations 2007 (CDG 2007). Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC, including amendments. Authorisations (Title VII Regulation 1907/2006)

No specific authorisations are noted for this product.

Restrictions (Title VIII Regulation 1907/2006)

No specific restrictions of use are noted for this product.

15.2. Chemical Safety Assessment

No chemical safety assessment has been carried out.

SECTION 16: OTHER INFORMATION

Information Sources Dangerous Properties of Industrial Materials Report, N.Sax et.al. ECHA Issued By **Technical Manager Revision Date** 12/08/2013 **ISSUE NO2** Revision SDS No. 7061 Safety Data Sheet Status Approved. **Risk Phrases In Full** R36 Irritating to eyes. Hazard Statements In Full H319 Causes serious eye irritation.

Disclaimer

This 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. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.